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NOTES ON THE TREATMENT OF WOUNDS IN WAR.

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When war was declared in England the first thought that came to all of us Australians who happened to be there at the time, as it was the first thought of every man of British blood, was: "What can we do?" It so happened that Lady Dudley's project of equipping a hospital, under the capable organizing headship of our old friend, Mr. Douglas Shields, afforded some of us the opportunity we desired. Colonel W. L'Estrange Eames was appointed by the War Office to the command of the unit; the personnel and equipment was rapidly assembled; the famous Ranelagh Club at Barnes gave us the use of their splendid grounds for a training camp; and within three weeks after the fateful fifth of August we landed at Havre almost into the arms of the Germans, who were at the moment pouring like a cataract over the North of France. Our first night under canvas in a large camp three miles out of Havre was a night of alarm, and the next day witnessed a strategic retreat to a goods shed on one of the wharves, where we dwelt for several days watching the process of evacuation of Havre by the British, and being in due time evacuated ourselves in company with a ship-load of R.A.M.C. Hospital units, and a number of horses; our destination was the new British base, St. Nazaire, on the west coast of France. There we camped on a plot of land near the outskirts of the town, on which, in addition to our tents, we put up hospital tent accommodation for about 100 beds. We also rented a very nice modern private hospital in the town (about 50 beds), and with an adjoining school-building that was lent to us, and that accommodated roughly another 100 beds, brought our hospital up to about 250. In addition to Colonel Eames and Mr. Douglas Shields, Surgeon-in-Chief, the personnel comprised Colonel George Horne, Major Dick, Captains Patterson, Mark Gardner, Wallace, Reynell, M'Donnell and Studdy. Mr. E. T. Thring, of Sydney and I were additional volunteers.

Our hospital was filled at once with wounded, which were sent down by train from the front, a distance of over 200 miles. St. Nazaire being now the base was the port to which the wounded men were sent to be shipped in hospital ships to England; but it was also the port at which troops and stores were being landed from England to be sent up by train to the front. Now it is a military axiom that troops and stores take precedence over everything, even the wounded; and as the French transport facilities between St. Nazaire and Paris were being over-strained, the wounded, I regret to say, had to suffer. They would often take three or four days over a journey that should have taken only a few hours; and while they were tended and fed on the train, there were no facilities for the dressing and treatment of bad injuries, consequently the wounds remained with the dressings unchanged during this long period. The condition of the serious injuries, bad compound fractures, etc., was terrible; all were suppurating and stinking, and the problem of treatment was one with which I felt unfamiliar. It is only fair to say at once that this evil state of affairs was not allowed to continue after the early days of the war had taught their lessons.

It will readily be understood that of certain classes of injuries, notably abdominal injuries, we saw but little; they did not reach us. On the other hand, compound fractures were very numerous, very bad, and very interesting in that they presented special features not usually seen in civil practice. It so happens that a remarkable controversy has recently taken place in the columns of the *British Medical Journal* on the question of the best method of dealing with compound fractures, and it appears that a leaflet on the subject, prepared by Sir Rickman Godlee, was issued to the military surgeons, advising that the wounds should be freely opened up in the first instance, or as soon as possible, and all the recesses of the wound sponged over with undiluted carbolic acid; this method of treatment, which is also advocated by Sir Watson Cheyne, has been vigorously opposed by Sir Victor Horsley; and many other surgeons of less commanding reputation have taken part in the discussion. None of the writers, however, seem to have been quite alive to certain very notable differences between the compound fractures of war and those of civil practice, to which I shall allude presently. Sir Watson Cheyne, in his most illuminating address before the Medical Society of London, lays down the detailed procedure to be adopted in dealing with a compound fracture. The first essential is to render it aseptic if possible, and the procedure is divided into the following two stages: (1) The purification of the surrounding area of the skin, as for the performance of an operation on the part, with especial precaution to protect the actual wound from further soiling during this process. Thus the first act of the surgeon after the wound is exposed will be to protect it with gauze wet with antiseptic solution, which gauze must be kept in place during the process of skin purification which follows. (2) The whole surrounding area having been prepared, the surgeon repurifies hands, changes gloves, towels, etc., and starts afresh as for the performance of an aseptic operation. So far there can be no disagreement; but now comes the crux of the argument. On the one hand it is advised that the wound should now be freely opened up, and all the recesses of it sponged over with undiluted carbolic acid. In order to do this thoroughly, the bone ends will have to be turned out freely. To this suggestion Sir Victor

Horsley demurs, and I may say at once that I am in agreement with him, despite the fact that it places me, strange to say, in the opposing camp to my old and honoured teacher and friend, Sir Watson Cheyne.

The truth is that the compound fractures of military surgery present most striking differences from those we are accustomed to see in civil work; they are caused in an entirely different way, and there is really very little similarity between the two classes of injuries. In civil surgery we say that a fracture is caused by direct violence, if it results from a severe blow on the outside of the limb; it becomes compound by one of the fragments being forced through the muscles and skin to the outer world. The ends of the fragments are stripped out of their periosteum and muscular attachments, and become displaced, freely movable, and accessible; the comminution, if there is any at all, is usually inconsiderable. It is a simple matter to turn out the bone ends, explore and swab out the recesses of the wound, and put the bones back in a better position than they were found in. If the surgeon elects to use undiluted carbolic acid, that is not the point I would criticize, although personally I am averse to applying any irritating chemical agent to the wounded tissues for reasons that I shall discuss later. The point I wish to make is the contrast between the war compound fracture and that which I have just described, and the bearing this would appear to have upon our principles and methods.

When a bullet or a piece of shrapnel strikes a bone it smashes it into a perfect mush of small fragments *in situ*, if I may so express it. There is no stripping of the bone out of the periosteum and muscular attachments which still retain their connexion with the numerous fragments holding them more or less in place; as one result of this, there is for one thing remarkably little displacement, and in the femur comparatively little tendency to shortening. Now the one hope of recovery of a useful limb in such a case depends upon all these multitudinous fragments being left in position where they lie. If any attempt is to be made to expose them freely in order to apply carbolic acid to all the remote interstices of this handful of fragments, it is quite certain that most of them will have to be removed, and eventualy it will transpire that the leg will be so impaired as to be not worth the saving. That this will be the predominating result if these fractures are to be opened up and freely exposed by an army of surgeons varying widely in surgical experience and acumen, I regard as certain. This being so, I have to answer the obvious question: "What, then, would you advise? Do you advise that no attempt should be made to render these cases aseptic?" I shall have to answer this question at some length.

First, I must make the commonplace observation that the antiseptic treatment of a compound fracture differs from the performance of an operation through the unbroken skin, in this, that in the latter case we have only to prevent the access of contamination, while in the former case we have to deal with contamination that has already taken place. Hence, in the compound fracture we can never be absolutely certain of success; we have to accept the presence of a certain element of chance, and our procedure is, in the nature of things, an inexact procedure.

In the second place, I would point to an observation made by Sir Watson Cheyne himself (an observation that I also made quite independently many years ago), that compound fractures antiseptically treated that went wrong seemed for some reason to become much worse than cases in which antiseptic methods had not been used.

Again, I well remember that comparatively late in his career Lord Lister became impressed with what he used to call the antiseptic power of the tissues, what we now-a-days speak of quite familiarly as tissue resistance. Roughly stated he detected the fact that healthy living tissues could resist a certain small amount of contamination, a discovery which was in the nature of a complete surprise to him, and which, if I remember rightly, influenced him in no small degree at the period when he was bringing himself to abandon the carbolic spray.

Now, to collate these last two observations: it has always seemed to me that the explanation is provided as to why the wound that has been antiseptically treated unsuccessfully should be apparently the worse for the antiseptic measures applied; the chemical irritant has so affected the tissues as to impair their natural powers of resistance.

A very disastrous experience many years ago of a patient with a compound fracture that went wrong in this way, and died of tetanus, made me determined never to apply any irritant antiseptic to the tissues of a compound fracture, and it is a thing that I never do. Otherwise my procedure is precisely that described by Sir Watson Cheyne; but when it comes to the purification of the wound, mechanical washing with sterile water or some unirritating solution is relied upon entirely, plus fixation and drainage. I have never seen any reason to regret following out this principle, and as a general rule a compound fracture so treated will follow an aseptic course, which is the utmost that can be said for any method of treatment. Thus there are two principles, either of which the surgeon may elect to follow. The one aims at bacteriological exactness, which cannot be attained, and which may result in considerable harm being done; the other shrinks from the possible damage that may be done, and trusts to mechanical cleansing of the raw tissues, aided by good drainage and fixation.

To sum up, I would venture the opinion that in civil practice it matters little whether strong carbolic acid or sterile water be applied to the raw tissues, provided always that all the other precautions as described by Sir Watson Cheyne are carefully observed, and that the final fixation, posture and drainage are skilfully managed.

In military surgery, however, for the reasons I have endeavoured to make clear, I would rule out the attempt to sterilize all the recesses of the wound by a powerful chemical antiseptic, and while employing all possible efforts that are mechanically permissible in the exceptional conditions presented to cleanse the wound, I would trust in the main to

good drainage and fixation as our chief means of combating the dangers of infection.

And now I must leave the subject of compound fractures, with which I have dealt at some, but I hope not excessive, length. In conclusion there are a few observations with reference to other military injuries which may be worthy of your attention.

A bullet or shrapnel will often inflict wounds that possess surgical interest of varying kind, even when the bone escapes and the injury is limited to the soft parts. Thus my first general impression as to the correct treatment of cases in which the missile had gone into the body and remained there (i.e., in which there was only a wound of entrance and none of exit), was to wait and see whether any trouble was going to result before hastening to remove the foreign body. A very short experience served to show, however, that this plan does not answer. A shrapnel bullet practically always suppurates, and even the large nickel-covered rifle bullet can very rarely be left; by far the best plan is to examine with X-rays, and remove the bullet at the first opportunity; this should always be done. When a shrapnel bullet passes clean through, leaving well-marked wounds of entry and exit, the case will look very straight forward and simple; but here again I found there was experience to be gained. It does not do simply to dress the wounds and to wait for them to heal. Where, for instance, a bullet has traversed the thigh or calf, leaving a track through the muscles, the following is likely to happen: While the surface wounds are being dressed and tended daily, suppuration will be commencing in the interior bullet track; the pus not having free exit at either end will pass into the intermuscular spaces, and a most troublesome condition will have arisen before we have become aware that things are not quite as they should be. Hence I would advise that this should always be borne in mind, and in the event of the wound being in such a situation that this occurrence is rendered likely, the following procedure should be adopted:—First, the track should be drained from end to end with a tube with one or two holes out in the middle of it. This tube should be left *in situ* for at least a week, or until the walls of the track are granulating well. Fixation of the limb so as to keep the muscles still must also be secured; in bullet wounds of the calf plaster of Paris with two windows is the best method; in the thigh the ordinary long Liston splint put on with the "Scotch sheet." "Taking the bull by the horns" vigorously in this class of cases will mean the avoidance of many long and tedious after-troubles.

Again, nerve injuries, causing transient paralysis, were sometimes sources of doubt and hesitation in the matter of treatment. For instance, a bullet had passed through the thigh from side to side behind the bone about the region of the upper part of the popliteal space, and there was complete paralysis of both motion and sensation over the area supplied by the external popliteal nerve. What should be done?

The following points were taken into consideration in arriving at a correct decision: (1) The nerve may or may not have been completely divided by the bullet, but the probability is that it has not. I saw two or three instances of traumatic paralysis of this kind, but in no case had the paralysed nerve been actually divided. (2) The track of the bullet is probably infected, and should be drained and the limb fixed. (3) Under these circumstances the nerve, even if it be divided, cannot be sutured immediately, but if rapid healing of the wound is secured there will be a good prospect for a successful nerve suture at a later date; while if the nerve has not been divided we shall by that time have evidence of the fact. Thus in the case described above we were in some hesitation at first whether to cut down and examine the nerve; it was fortunate that we decided to wait, for the bullet-track suppurated badly, and gave some trouble; but the paralysis gradually recovered.

On the whole, military surgery is very inferior in general interest to the ordinary surgery of our civil hospitals; nevertheless it must be confessed that even a monotonous succession of shrapnel wounds will provide considerable variety owing to the infinite number of problems that may arise from the organs damaged in the passages of the missile, or from the situations in which they ultimately lodge.

NOTES ON TECHNIQUE IN PROSTATECTOMY AND URETEROTOMY.

By **W. J. Stewart McKay, M.B., M.Ch., B.Sc.,**
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Prostatectomy.

I hold that the condition of the kidneys, together with the preliminary treatment, are of more importance than the actual technique in prostatectomy. It is not so much a question whether the operation is done by the suprapubic, or by the perineal route: the end organ that governs the result is the kidney.

Given an old man with an enlarged prostate, a decent heart and good kidneys, the removal of the prostate is an operation that is now most successful. But the after treatment is not agreeable, either to the patient or the nurse. I wish therefore to bring forward a very small point in the technique which makes the after treatment less disagreeable to the patient.

After performing prostatectomy in cases where a bladder was in good condition, I have often desired to close the bladder and not drain from above. When a few months ago four old men, whose ages ranged from 64 to 75 years, presented themselves almost simultaneously I determined to close the supra-pubic opening in the bladder, and drain by a catheter introduced in a manner to be described presently.

These men were all good subjects; that is, they had good kidneys. I have long held that a bad kidney is your worst enemy in any serious operation.

The technique that follows has nothing unusual about it. Before I operate I like to have the old man in the hospital for a week, or more, especially is he has had retention of urine, and all the urine in the bladder had been drawn off at one sitting

by his medical attendant; that always means a congested kidney. I give these old fellows both the tincture of digitalis and the infusion; but if they have an irregular heart I find that a few weeks on strophanthus and iodide of potassium and nitroglycerine is a good way of preparing them. An hour before the operation they have morphine and atropine, and I prefer chloroform to ether; but consider the insufflation method much superior to any other, for the ease with which these old men take the anæsthetic by this method is a revelation.

Having made a preliminary incision down to the bladder, I direct my assistant to pass a soft rubber catheter, and then to distend the bladder with fluid. After the bladder has risen up slowly, I insert a silk suture on either side of the median line. This acts as a guide and a retractor.

A small opening is made in the bladder wall, and the left index finger is introduced. The assistant now passes his right index finger into the rectum, and pushes the prostate up. The surgeon introduces a sharp-pointed pair of scissors into the bladder, and makes a nick in the capsule on either side of the urethra. He then introduces his right index finger into the rectum and helps his left finger to enucleate the prostate. This enucleation should be done with care, and not with force. This point is well brought out by Crile, in his new work on *Anosi-Association*, when he says "with careful and most gentle manipulation the prostate is enucleated with the finger. Not 'how rapidly,' but 'how carefully' is the slogan."

The prostate having been enucleated, the surgeon sterilizes his right hand and draws on a glove, and the prostate is removed through the bladder opening. Then comes the step that I think makes the after treatment more agreeable to the patient and the nurse. The catheter already introduced into the bladder is pushed in until the eye reaches up through the incision. A piece of silk is passed through this eye, and the same silk is carried through the eye of a No. 14 soft catheter. The catheter already in the urethra is withdrawn, and the No. 14 soft rubber one follows, until its large, dilated end stops at the beginning of the proximal end of the urethra. There it lies in the cavity left after the prostate has been enucleated. The catheter does not require to be tied in, the dilated end cannot pass. I generally cut a side eye in this dilated end, to assist the drainage..

The incision in the bladder is closed with two layers of chromic gut. I used silk in the first operations for the upper layer, but I think this is a mistake, for I found that about the tenth day there was some leakage, and the silk then became a foreign body and gave trouble, because it became infected.

No effort is made to remove the blood clot from the bladder, and the distal end of the catheter is connected with a tube that leads into a bottle at the side of the bed. The bladder is not irrigated unless the catheter is blocked by a blood clot.

The patient has quite an easy time for ten or twelve days, and then the catheter begins to trouble him, for the dilated end becomes soft and begins to pass down the urethra. It is better to remove the catheter about the tenth day, and pass a smaller one (say No. 10), and to tie it in. The supra-pubic wound may leak a little about this time, but it is only through a small sinus; it is a good plan to place the old man in a hot bath every day about this time, and he soon learns to pass his urine into the hot water if the catheter is removed.

Ureterotomy.

The removal of a calculus from that portion of the ureter which lies within three or four inches of the bladder has never been an easy operation, and the incision bequeathed to us by Morris is so extensive that any suggestion that makes the method of performing the operation simpler should be received with favour.

Judd, one of the surgeons at the Mayo Clinic, has recently suggested and practised with success on a few cases, a method of exposing the ureter at its lower end. Two cases having recently presented themselves with symptoms of calculus in the ureter, I determined to try Judd's plan.

The first case was a young, muscular man, with a history of sudden acute pain in the region of the left kidney, followed by other attacks which could not be interpreted as anything but renal colic. A skiagram revealed a faint indication of the calculus, so I asked Dr. Harris to pass a uretral catheter, and this he did with consummate ease. He decided that there was a stone in the left ureter, a few inches from the bladder.

The patient was placed in the Trendelenburg position; a median supra-pubic incision was made from the pubes to the umbilicus, and the peritoneum exposed. An assistant then passed a catheter and distended the bladder with fluid. Judd does not do this, but I think this step is useful, as a distended bladder is more easily pushed off the peritoneal tissue, to which it is attached by cellular tissue, than an undistended bladder. When the base of the bladder is reached, the operator introduces his left index finger and searches for the calculus. In the first case, as the stone was small, it took some little time to locate it. When this was done a pair of sponge forceps was passed down, and ureter and the tissues about it were grasped on the kidney side of the stone. With another pair of forceps the tissues and ureter between the calculus and bladder were grasped. Some long retractors were then introduced, so as to make the field visible, the assistant aiding by pulling on the bladder, which is best held by grasping it with a piece of gauze and the thumb and index finger. The calculus was steadied with the left hand while an incision was made into the ureter and the stone removed. No sutures were introduced into the ureter.

In the second case, the calculus was large, and was easily seen in the skiagram. A similar incision and technique were adopted, but in this case, after slitting open the ureter over the stone, I introduced a single catgut suture just before I removed the stone, and this helped to close the opening.

In both cases a rubber tissue drain was introduced and placed by the incision in the ureter; and in order

to keep the wound open, a gauze drain was introduced for an inch or so. The result was very different in the two cases. In the first case, with the small stone, in which no suture had been introduced into the ureter, urine passed up for two weeks in a continuous drain. In the second case, in which the stone was four times as large, and in which only a single catgut suture was introduced to draw the edges of the ureter together, no urine passed whatever by drainage.

I should like to draw attention to a fact which struck me in both operations. If the bladder is stripped off the peritoneum with care a very neat canal can be formed, which leads down to the ureter. This canal is formed on one side by the bladder in front, posteriorly by the peritoneum that is pushed from the back of the bladder, and the canal is completed by the fat and cellular tissue on the outer side. It is a very complete sac about five inches deep. I took the precaution to take up the mouth of this sac and sew it to the abdominal incision, and by this means one found an excellent tube for the urine to escape by.

It is not wise to use gauze next to the incision in the ureter; on several occasions I heard William Mayo say that if you placed gauze next to an incision in the ureter you would most certainly get a urinary fistula, and others have confirmed this observation.

Since writing the above I have operated in a third case of stone in the ureter, using the method described above with success.

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REMARKS ON WHOOPING-COUGH, WITH ESPECIAL REFERENCE TO ASPHYXIA AND CONTINUED FEVER (OR CONSTITUTIONAL WHOOPING-COUGH).

By **Mary C. De Garis, M.D., B.S. (Melb.),**
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A recent experience of an epidemic of whooping-cough of uncommonly severe form has convinced me that text-book authors do not lay sufficient stress on the liability to the occurrence of asphyxia and continued fever.

I would classify whooping-cough as follows:—

(*A*) The ordinary form, with paroxysmal cough and little constitutional disturbance.

Complications:—

(1) Catarrhal, *e.g.*, bronchitis, broncho-pneumonia, pleurisy, gastro-enteritis, etc.

(2) Mechanical.

(*a*) Vomiting after coughing, often so severe as to interfere with nutrition.

(*b*) Hæmorrhage from congestion, *e.g.*, subconjunctival hæmorrhages, epistaxis, spitting blood, etc.

(*c*) Pulmonary collapse, from the coughing, apparently the only explanation for many cases showing numerous variable adventitiæ in chest, with unimpaired general condition.

(*d*) Suffocative form, leading in infants to actual asphyxia, requiring artificial respiration.

(3) Supervention of form *B*.

(4) Concurrent illness, *e.g.*, measles, urticaria, etc.

(*B*) The constitutional form, or continued fever of whooping-cough.

In this, the complications may occur as above, the catarrhal being the most frequent, and the asphyxial probably the most dangerous, as the child has so much less reserve on which to draw for the recovery from the exhaustion of the apnœa. Tuberculosis may be a sequel.

The occurrence of continued fever during the course of pertussis, with few (if any) physical signs to account for it, is a very puzzling condition, unless it be remembered that it may be due to a constitutional infection with whooping-cough, comparable to a similar condition in, *e.g.*, influenza.

In my cases there were fever, rapid pulse, rapid respiration, slight cyanosis, *alae nasi* working, jactitation, apathy, or screaming, head retraction, meteorism, failure of nutrition, with entire loss of appetite; in several cases the chest was perfectly clear, in others a few casual adventitiæ were heard: in all the whoop existed before the onset of the fever. In aboriginal or half-caste infants the condition was terribly fatal, and in whites alarming. In my opinion, this condition is frequently concurrent with, and often responsible for, the graver cases of complicating broncho-pneumonia, pleurisy and gastro-enteritis, though I have not included such cases among those reported.

Asphyxia again is an alarming condition in infants, in whom artificial respiration may be necessary, and is not always successful. Asphyxia may follow a quite feeble cough.

From a study of this epidemic it seems that pertussis is especially liable to assume a constitutional form in infants of aboriginal or part-aboriginal origin, and is excessively fatal in them: that older aboriginal children and adults usually recover from the disease, which is apt to be of the more ordinary form in them. The insufficient care aboriginal infants receive may account in part for the mortality in them. Measles may occur before, during, or after an attack of pertussis, and it seemed to have little adverse effect; in no case, however, did I see measles and the continued fever of whooping-cough occur together.

The younger the child the greater is the liability to the occurrence of asphyxia or continued fever, and the greater is their fatality.

Serious symptoms are frequently due to the constitutional disturbance of whooping-cough rather than to the complications of bronchitis and broncho-pneumonia to which they are commonly attributed.

Cases: Asphyxia.

1. White, male, twin, age 1 month. Pertussis started when less than a fortnight old; the child first whooped when three weeks of age. Three days later he had an attack of asphyxia, necessitating artificial respiration; a similar attack occurred on the following day. This child required help in

coughing (intermittent pressure on chest) for several days thereafter, after which he gradually recovered. He is an instance of the mechanical danger of pertussis, as there was never any sign of constitutional or catarrhal disturbance. He is now eight months old and in good health.

2. Female, half-caste (both parents half-castes), age 17 days. This patient started coughing when nine days old, if not earlier; she whooped when fifteen days old, and recovered spontaneously from a choking fit the next day. The following day she had a similar attack, which left her bluish, with grunting breathing and slight subconjunctival hæmorrhages. After this she was under continual observation for eight hours, during which she had four more asphyxial attacks, each necessitating artificial respiration. After the last she died, owing to progressive cardiac weakness. This patient was feverish; her chest was clear of pathological physical signs.

Continued Fever.

3. White, female, aged 23 months. This child had pertussis with broncho-pneumonia in April, from which she recovered well, except that the whoop persisted and was frequent. In the middle of June she suddenly became ill. The temperature was 103° and the pulse-rate 152; there was slight cyanosis, headache, and loss of appetite, and she became jerky and nervous. Her chest and throat were clear. On the next day, the temperature ran up to 106.4°. Jerky, twitching movements and screaming occurred and later some head retraction was seen. Three days later there was still some fever (104.4°), a rapid pulse (168) and great meteorism, which required washouts for five successive days. Ten days after the onset of illness, a very few crepitations were heard at the bases of both lungs for two or three days. The temperature became normal a fortnight after the onset of illness, and appetite returned a week later. Her recovery was complete.

4. Male, aboriginal, age about 2½ months. This patient had a whoop and a few rhonchi when I first saw him. Nine days later the chest was clear. A week later he looked ill. The temperature was 102.2°, and the pulse-rate 144. There was frequent cough, but no choking. The chest was clear. On the following day, the pulse-rate was 163 and the temperature 99.3°. The chest was practically clear, but the patient looked very exhausted. On the next day the pulse was impalpable, the breathing was rapid, the *alae nasi* were working and the movements were jerky. He died that night.

5. Female, half-caste, age 4 or 5 months. When first seen she had a slight whoop and heavy breathing. The chest was clear. Five days later the temperature was 99.6° and the pulse-rate was 156. A few crepitations were heard over both lungs. There was some diarrhœa. Two days later the chest was quite clear of crepitations, the temperature was 103.6°, her head and body shook constantly. The diarrhœa had ceased. On the following day the movements were less jerky, and the chest remained clear. In the afternoon she became cyanosed, and the breathing rapid and laboured. The pulse was impalpable, and the cough was feeble. She died that day.

6. Female, half-caste, age 9 months (both parents were half-caste). This patient had a cough when first seen and whooped with vomiting. The temperature was 99.4° and the pulse-rate 160. She was constantly grizzling. The chest was clear, but the *alae nasi* were working. Three days later a few crepitations were heard at both bases. On the same day the parents brought the patient to me, as she had had a fit after coughing. They stated that she lost her breath, and her eyes were becoming fixed. When examined, her eyes were staring, her lips were blue, her face was pale and her pulse scarcely perceptible. The respiration was rapid and difficult, and the temperature was 104.4°. She was restless. A little later she coughed feebly and constantly. She died the same night.

Reports of Cases.

TWO UNUSUAL CASES.[1]

By **H. Busby, M.B., M.S. (Syd.),**
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I have put together a few notes on two cases occurring in the course of ordinary general practice, which at first appeared to be ordinary cases but later showed marked departure from the normal, and may therefore prove of interest to the members.

Case 1.—D.R., æt. 9 years. The patient was first seen on June 30, 1914. She was suddenly taken ill with pain in the right side of the chest, in the neighbourhood of the nipple. The temperature was 102°, the pulse-rate 120, and the respiratory rate 36 to the minute. On auscultation, a friction rub was heard just below the nipple, over the area the size of a five shilling piece. Next morning there was distinct dulness, with tubular breathing, over the whole lower lobe of the right lung. Apparently a straight forward lobar pneumonia. The crisis was delayed till the tenth day. The temperature continued to rise at night to 101° and 102°, but dropped to the normal line in the morning. Dulness persisted over the lower lobe of the lung; in fact, it began to rise above the nipple. A needle inserted one afternoon showed greenish, foul-smelling pus. Arrangements were made for an operation on the following morning, but at 3 a.m., on receiving a telephone message, I went to the house and found the patient much worse. The dulness extended as high up as the clavicle, the apex-beat was displaced 1½ to 2 inches outside the nipple line, the colour was bad, and there was much distress. I had a trocar and cannula with me and some tubing, which I attached to the cannula, and made a puncture between the ribs, leading the tube into a basin of boracic solution. About one quart of foul-smelling, greenish-grey pus escaped. The child was asleep in thirty minutes. Two days later the empyema was evacuated, and a tube inserted. For some two months the discharge continued to flow freely. The pus improved in colour, and gradually lost its smell, and the general condition improved, but the skin round the tube became excoriated and very tender, so much so that the tube had to be removed. For two or three weeks the discharge appeared to decrease and the opening almost closed. At the end of this time the discharge became profuse again. I sent some of the pus to a bacteriologist, who, after a week, reported that he could not get any growth and asked for another sample to be collected after discontinuing the use of all antiseptics. I sent some at the end of 14 days, having dressed the wound with saline. After another seven days he again reported that no growth had occurred. Four days later he again wrote and reported that he thought he had found actinomyces in the

[1] Read at a meeting of the Western Medical Association (New South Wales) on January 15, 1915.

pus, and was trying to make sure by cultivations. A few days after he reported that he had succeeded in making a cultivation, and sent a vaccine. This has not been in use long enough to produce any effect, though the child's mother affirms she can see an improvement. I having been giving iodide of potassium steadily since hearing of the presence of the actinomyces. The child has lived in town all its life, has never had a holiday in the country, and there are no cattle or horses kept, so that it is impossible to guess at the source of infection. There were some bad teeth in both jaws, which were extracted under an anæsthetic some twelve months before the attack of pneumonia.

Case 2.—Mrs. R. E., 41 years of age, was seen on December 8, 1914. She complained of great pain after defæcation. She had had piles for several years. She had had bacilluria (colon bacillus) for at least two years. Vaccine treatment by a specialist had been employed, and had resulted in the urinary condition being much improved. On examination, small fissure seen at base of pile. She readily consented to operation. The night before the operation she had castor oil ʒi; and the following morning two enemata. The rectum was empty at the time of the operation. The sphincter was thoroughly stretched, and the piles were ligatured and cut off. Fourth day later oil and enema were given with good result. She still complained of much pain in the back and bearing down with tenderness over the sigmoid. The nurse ventured the opinion that, in spite of good results from oil and enemata, she thought the patient was still constipated. More oil was given, followed by an enema. Result: 10 actions in 24 hours, the nurse reporting numerous old, black, hard scybala in each action. One would have thought the end had been now reached, but the day after there was still bearing down. Vaginal examination showed a large scybalous mass filling the pelvis. This was so large that I ordered four hourly injections of olive oil to soften it, and in twenty-four hours castor oil and a soap and water enema. From this time on the condition rapidly improved, though up to the end of the third week after operation, small old scybala were being passed. The bowel had apparently given up its tendency to act as a store house.

The patient affirms that for some years she has never failed to take her cascara at night and Hunyadi in the morning, and at times to give herself an enema; yet in spite of all her care this accumulation has occurred, and has probably been the cause of her bacilluria. I have advised a course of abdominal massage in hope of restoring tone to the colon and preventing reaccumulation. Curiously, through all her bacilluria and probable auto-intoxication, her general condition has remained good. She had always taken plenty of exercise, gardening and walking.

TORSION OF THE SPERMATIC CORD, CAUSING GANGRENE OF THE TESTICLE.

By **J. Inglis Robertson, M.B., Ch.B.,**
Lismore, N.S.W.

Some time ago I was called to see J.C., aged 15 years. He had been seized eight hours before, while seated at table, with sudden intense pain in the right testicle. Two years previously he had had a similar experience, the pain, however, had passed off after about a half of an hour, leaving him none the worse. In the present instance the pain persisted. Becoming alarmed, he drove into town—a distance of 25 miles. I saw him soon after his arrival. I found him obviously in great pain, but he told me that the pain was gradually becoming less severe. The temperature and pulse were both normal. The testicle was found to be of stony hardness and intensely tender to palpation. The structures of the cord appeared to be normal, and no tenderness was elicited on palpation of the cord.

The provisional diagnosis of hæmorrhage into the testicle was formed, and he was kept under close observation. Four hours later, *i.e.*, 12 hours after the onset of his illness, the pain was not quite absent, and the testicle was even more tender to palpation than at the previous examination. It was now slightly swollen, and the temperature had risen to 99.2° F. Feeling far from satisfied that the root of the mischief had been reached, I advised an operation, but this advice was refused, for the reason that the pain had almost disappeared. On the following day marked œdema of the scrotal skin was present; there was an entire absence of pain, but the tenderness on palpation persisted. An operation was insisted on, and this was agreed to. On the scrotum being opened, half an inch of the cord, together with the entire testicle, were found to be gangrenous. The *tunica vaginalis* contained a small quantity of blood-stained fluid. The diseased testicle and cord were removed. After removal, it required a careful examination of the specimen to demonstrate the actual torsion of the cord. In such a case early diagnosis and operation are essential if the testicle is to be saved.

The points which seem to me to be important are: The sudden severe pain of onset; the gradual lessening and ultimate disappearance of the pain; and the persistence of the tenderness to palpation.

Reviews.

MEDICAL DIAGNOSIS.

The art of diagnosing correctly cannot be learned; it may be improved and extended by practice and experience, but, like all arts, it must be inborn. The science of making diagnoses, on the other hand, is not only to be acquired, but may be presented in a more or less stereotype fashion. For successful clinical work, the mere recognition of the condition, as such, is wholly insufficient. The skilled clinician never rests content until he has built up a mental picture of the anatomical appearances and physiological changes of the entire organism in cases of abnormal function or disease. Books, lectures and other forms of instruction on medical diagnosis must necessarily fail. But they may assist in the making of a skilled diagnostician. It is not easy to determine whether this object will be achieved by a new publication on the subject, written by Drs. Latham and Torrens.[1] These physicians are themselves well versed in the art and science of making diagnoses, and their high reputations as clinicians impell us to consider with care and attention what they have to say. Their task is obviously to present to the student of medicine in a convenient form a work in which the chief foundations to diagnosis are set forth. They follow the scheme of arranging diseases in alphabetical order, and after defining the affection and at times devoting a few lines to its etiology, varieties, course and nature they give in brief the characteristic signs and symptoms, and other means of diagnosis, and also the landmarks on which it may be differentiated from other affections presenting more or less similarity. In the main, the stones with which a diagnosis can be built are accurately drawn and clearly depicted. The form of expression is clear, and the reading singularly bright for so stereotype a subject. Much care has been devoted to the selection of good illustrations, which supplement the reading matter, and are essential to the task. There are, however, shortcoming which detract from the value of the book to a not inconsiderable extent. It may be assumed that in the majority of instances, the practitioner will get near to the correct naming of the disease from which his patient is suffering. If he cannot do so, he had better select the army as his calling. But near is not close enough. He has therefore to be certain which of the possible diseases is before him. In the case of varicella, the exclusion of variola, impetigo and some other infective conditions must be arrived at with certainty. From the descriptions given, it is doubtful whether this end will be achieved. One of the most difficult tasks a practitioner is called upon to perform is to recognize enteric fever in all its varieties. Every sign, symptom and bacteriological means should be at the practitioner's fingers' ends for this purpose, and, in addition, he should know when to suspect typhoid fever. Drs. Latham and Torrens

[1] Medical Diagnosis, by Arthur Latham, M.A., M.D., F.R.C.P., and James Torrens, M.B., M.R.C.P., 1915. London: J. & A. Churchill; Demy 8vo., pp. 641, illustrated. Price 15s.

fail to lead him to this desirable position. The omission of such signs as the typical typhoid tongue, or of any mention of modifications of Widal's tests, *e.g.*, Ficker's *Diagnostikum*, are minor matters. The failure lies more in the fact that a clinical sense and a general experience is required, in addition to book knowledge. The Australian physician will not find the description of the diagnostic signs of *taenia echinococcus* satisfactory. The statement that suppuration in a hydatid cyst gives rise to symptoms of septic absorption could easily be taken to means that this is the rule, instead of being an exceptional occurrence, save after the suppuration has lasted for a considerable time. On the other hand, the chapters on cardio-vascular, respiratory and nervous affections are excellently compiled, and almost provide what is required for an accurate diagnosis. Notwithstanding these criticisms, we cannot refrain from expressing the opinion that this work will find favour with many, and that those who use it with care and skill will find it of considerable value.

AUSTRALIAN COCKROACHES.

Domestic cockroaches have been shown by Dr. Shipley in his excellent articles in the *British Medical Journal* on "Insects and War" to play an important part in the economy of living things. Froggatt, in his "Australian Insects," tells us that there are over two hundred Australian species of this family. It is extremely probable that these creatures may be of direct service to man by helping to control other insect pests, including various kinds of flies. A recent contribution to our knowledge on cockroaches has been issued by Dr. Eland Shaw, of Melbourne, who read a paper[1] before the Field Naturalists' Club of Victoria, dealing with notes on Australian cockroaches, with some preliminary descriptions of a few new species. This contribution is another instance of an advance in the knowledge of natural sciences achieved by a member of the medical profession. It is to be hoped that Dr. Shaw will continue and extend his researches and publish the results of his investigations from time to time.

We have been requested to publish the following notice:—

The Ambulance Construction Commission.

This is the first great war in which field motor-ambulances have been extensively used. It was inevitable that many defects should be found in existing types, and in various quarters experts began to ask whether something could not be done to standardize the patterns and to improve the type. At the instance of Mr. Henry S. Wellcome, the founder of the Wellcome Bureau of Scientific Research, a Commission has been formed, and the names of members show at once that the matter is regarded as of first importance by those most intimately connected with the welfare of the wounded soldier.

Sir Frederick Treves, whose long experience and distinguished service specially fit him for the task, has consented to be the Chairman. The Admiralty is represented by the Director-General of the Medical Department, R.N., while the Quarter-Master-General to the Forces and the Acting Director-General, Army Medical Service, represent the War Office. The British Red Cross Society is, of course, represented by Sir Frederick Treves, and the St. John Ambulance Association by Sir Claude Macdonald and Sir John Furley. The remaining members are all experts. This Commission will first and foremost act as a judging committee for the award of prizes to the value of £2,000 provided by the Wellcome Bureau of Scientific Research. These prizes are offered for the best designs of an ambulance body which shall fit a standard pattern motor chassis for field motor-ambulances. The last day for the receipt of competing designs is June 30, 1915. It is hoped that the competition will bring in a number of ingenious designs, from which the ideal field ambulance body will be evolved.

It may be asked why the competition is restricted to designs for a body and not for the complete ambulance, including a chassis. The reason is that a chassis takes much longer to build than a body, and that, when war breaks out, it is impossible to get at short notice anything like a sufficient number of any one type of chassis. On the other hand, a standardized body to fit any chassis of approved dimensions can be constructed in numbers at comparatively short notice. And a perfected body is badly wanted to ensure complete comfort for the wounded.

It is hoped that the information obtained by the competition, and in other ways, will be published in some permanent form, available for future reference. Probably, in addition to one design of special excellence, there will be submitted various ingenious suggestions which may be incorporated in the pattern design approved by the Commission. For these, a portion of the prize-money has been set apart. The first prize is of one thousand pounds, the second of five hundred, and the third of three hundred pounds. All details of conditions may be obtained from the Secretary, the Ambulance Construction Commission, 10 Henrietta Street, Cavendish Square, London, W. The competition is open to citizens of all nations.

THE SMALL-POX BILL.

Difficulties have arisen between the Federal Treasury and the New South Wales Government over the payment of the expenses incurred in the treatment of New South Wales small-pox patients in quarantine. It appears that after the Quarantine Act had come into force, the question of liability for these expenses was raised by the New South Wales Government. It was held that inasmuch as the segregation of the patients is ordered by the Federal authorities, the State Government could not be held responsible. Representations were made to the New South Wales Treasury, and it was pointed out that unless some financial arrangement were entered into, the Federal Government would not carry out any further isolation of New South Wales small-pox patients. Under pressure the Premier of New South Wales agreed to pay the sum of 6s. a day for every patient suffering from small-pox, and 4s. 6d. a day for every contact, during the period of their confinement in quarantine. This arrangement came into force on February 9, 1914. The Federal Treasury put in a claim for these charges, but the New South Wales Government only paid for patients and contacts placed in quarantine subsequent to February 9, 1914. The amount claimed in respect of the charges prior to the date mentioned amounted to £8,865. The amount of the admitted liability was £3,390. At the present time the New South Wales Government apparently has no intention of paying the larger amount, while the Federal Treasury is urging its claim on the ground that New South Wales should pay for the work done in its interests. Mr. Holman has stated that the Crown Law Officers advise him that the State is not liable for any charges incurred before the date of the arrangement.

MOSQUITO ERADICATION IN TOOWOOMBA.

At a meeting of the Toowoomba City Council, held on February 22, 1915, Dr. T. A. Price moved that a deputation from the Council wait on the Commissioner of Public Health with a view of discussing the institution of a mosquito crusade in the district. He pointed out that the presence of anopheline mosquitoes, and also of stegomyia taken in conjunction with the arrival of malaria patients from New Guinea rendered it essential that an energetic campaign should be followed up. The motion was agreed to, and it was determined that the adjoining local authorities be invited to co-operate with the Council.

[1] Reprint from the "Victorian Naturalist," 1914, XXI., 7, No. 7, Australian Blattidæ, Part 1, Notes and Preliminary Descriptions of New Species, by Eland Shaw, M.R.C.S., pp. 6.

Dr. G. S. Thompson writes that he wishes the sentence beginning: "After the insertion . . . ." (line 28, right hand column, p. 168, in his article on "A New Operation for Moveable Kidney," Feb. 20, 1915) to read: "After the insertion of the kidney into the sling through the internal opening, the latter serve to lace up the outer gap and are then used to suspend the organ from the abdominal wall." He also wishes the sentence beginning: "The kidney having been exposed . . . . ." (eight lines from the bottom of the same column) to read: "The kidney having been exposed in the usual way, is inserted through the hilum gap, aided by the opening on the convex border of the net, into the sling. The external aperture is then laced up by the two free ligatures."

The Medical Journal of Australia.

SATURDAY, MARCH 6, 1915.

The Abortionist.

Dr. Foreman has performed an extremely valuable service in speaking plainly and without reserve at the annual meeting of the Benevolent Society of New South Wales on the subject of abortionists. His disclosures have, as would have been expected, been taken up by the daily press with avidity. Scandals are of commercial value to the newspaper, since the public will buy at all times a paper which contains unsavoury information. But the newspapers have good reason for not assisting to find a remedy for the evils which exist. Similarly, politicians find it difficult to keep on good terms with the members of their constituencies if they seek for efficient measures to suppress vice and to hunt down the effect of illicit excesses.

We are informed that doctors, nurses, midwives and quacks of all kinds procure abortion on a large scale in Sydney. We are aware that similar practices exist in Melbourne and other Australian cities. Of course, these vile practices are being followed all over the world. But it would appear that at the present time and in the Commonwealth abortionists find a particularly favourable field of activity. The Hon. F. Flowers is reported in the daily press to have expressed the opinion that the authorities are powerless to stem this traffic, chiefly because of the difficulty which the police experience in obtaining convictions. We differ entirely from this view, and hold the opinion that a great deal can be done to minimize what is a disgrace to an enlightened country. Measures of repression must be ruthless to be effective, and the higher the social status and education of the individual who sells his soul for a few pounds, the less pity should be shown and the more drastic should be the punishment. If a couple of medical men who drag their noble profession into the mud were to be hanged after the death of an unfortunate woman who, in desperation, seeks their assistance, the number of members of the medical profession who procure abortion would diminish rapidly and sensibly.

In order to devise a plan of stemming this traffic, it is necessary to consider how women know to whom to apply. There are two sources of this information. The first is through the daily or weekly press. The advertisement columns of reputable journals contain announcements from persons who ostensibly are willing to treat certain sexual irregularities, diseases or weaknesses, or to attend women in confinement under the seal of confidence. It is never difficult to detect what these advertisements really mean. The second mode is by hear-say. One woman tells another that a certain doctor or other person will get her out of her trouble. In order to attack the problem, it is necessary, in the first place, to disturb the freedom of advertisement. Fresh legislation is required in this respect. It should be made an indictable offence to advertise a remedy for a sexual disorder, a means of affecting sexual function, or a treatment of any kind whatsoever of pregnant women. The wording would have to be framed to include the treatment of venereal disorders, of impotence, of menstrual disturbances, and of pathological affections of the sexual organs, as well as interference with pregnancy, including normal pregnancy. An exception could be made in respect to registered maternity institutions and nursing homes, provided that these homes and institutions are subject to inspection. Medical practitioners are not permitted to advertise, and the same should apply to certificated nurses and midwives. Further than that, the proprietors and editors of the newspaper publishing the proscribed advertisements should be prosecuted in every instance.

In this manner, it would be easy to cut off this method of letting women know the names and addresses of abortionists. A different problem is presented in regard to the passing on of the unenviable reputation by word of mouth. While the police should have no difficulty in ascertaining which persons are said to carry out these practices, it is a different matter to substantiate any charge on the slender ground of ill-repute, and one which opens the way to endless and dangerous abuse. But the matter is so serious and so far-reaching in its ultimate effects that no legitimate means may be neglected. A special department of the police should be organized for the purpose of following up with

caution and circumspection cases in which this practice is known to be followed. A suspected person would be subjected to detective methods. The success of judicious watching would depend on whether the interference is carried out skilfully or not. In the latter case, the visitor to the abortionist's home would be found applying for admission in a hospital after a short time, in the majority of instances. The nature of the illness for which the woman is admitted would not be divulged at the hospital, but inasmuch as she could be arrested as being accessory before the act, very little difficulty should be met with, provided that capable inspectors carried out their work cleverly. Again, it should be the rule to charge the patient in every case, but to offer every inducement for her to turn *King's Evidence.* Should the abortionist perform the work skilfully, it might be necessary to adopt that form of detective investigation which is not uncommonly resorted to in divorce cases. Distasteful as these methods may be, the traffic, which they would be directed against, is so abominable that they would be admissible.

Attention has been called to the extent of these practices, and it has become essential that a really effective remedy should be found. There is no excuse for inertia. Every case must be followed up with energy, and the sentences passed should be deterrent as well as punitive.

MEDICAL INSPECTION OF SCHOOL CHILDREN.

When the Local Government Board in England drew up its now celebrated memorandum dealing with the machinery for the carrying out of the medical inspection of school children, it was pointed out that the ultimate object of the new legislation was "amelioration," or mass treatment. The indications as to how this treatment would be carried into effect were not at first evident, but the British Medical Association anticipated the difficulties which were likely to arise, and claimed that under no conditions should the work of inspection be combined with that of treatment, and that as far as it was practicable the latter should be carried out by local practitioners. This principle must be upheld in the interests of the community and in fairness to the local practitioners. It is quite obvious that mass treatment is inferior to individual treatment. The family doctor, be he private practitioner or Lodge Medical Officer, is in a better position to improve the health of the child than the salaried medical officer, who has to do this work on a wholesale scale. The words of the L.G.B. are not forgotten, and the result of wholesale treatment will be amelioration, and not cure.

The Minister of Education of Victoria has discovered that over 33 per cent. of the children found at the inspection to be defective, do not receive any form of treatment for their defects. He has taken the wise precaution of appointing nurses to visit the homes of these children, and to endeavour to arrange for the treatment of the defects. This move indicates that the Victorian Minister is not inclined to provide wholesale treatment if this can be avoided. The Victorian Branch of the British Medical Association will have an opportunity of considering the position before any undesirable step is taken. Treatment is essential. This treatment can be effected in several ways. Perhaps the best method to be followed is to instruct the nurse visiting the children, who have not obtained adequate treatment after the lapse of a reasonable time, to warn the parents of the serious consequences of neglect. If this fails, the child should be taken by the nurse to a private practitioner, who is either the family doctor, or in the absence of a regular family doctor, who is willing to treat children under these circumstances. The local authority would then be liable for the fee, but this fee should be recovered from the parents, if they are in a position to pay it. As an alternative, a school clinic can be established, with a staff of local practitioners, who take duty in rotation. Every practitioner in the district should have the right to serve on this staff, and only those children should be taken to the clinic whose parents have no regular family doctor, or who, for private reasons, refuse to allow the child to be taken to him. In regard to special forms of treatment, it may at times be found that it is necessary to engage the services of a trained specialist. In such a case, the profession must decide which specialties necessitates this arrangement. As a rule ophthalmic work and X-ray work are willingly handed over to a practitioner who has made a special study of these branches of medicine.

CREMATION.

The Cremation Society of New South Wales held its sixth annual meeting in Sydney on February 2, 1915, the Hon. John M. Creed, M.L.C., M.D., the President, in the chair. While public opinion is being educated gradually in favour of the disposal of the dead by incineration, the movement is not progressing as rapidly as it should, considering the hygienic importance of the method.

The history of the attempt to introduce cremation into New South Wales shows that even when the most potent argument can be put forward in support of a sanitary innovation, it is extremely difficult to move Governments to take action, unless an electoral incentive can be brought into play, or unless the public can be stirred out of its usual lethargic inertia on vital matters. The Hon. J. M. Creed has long recognized the advisability of providing an efficient crematorium. He found that it was essential to introduce legislation in order to protect the public from abuses and dangers, some of which may even be present in the case of earth burial. A Bill was

drafted, the provisions of which were based on the Acts in existence in European countries. This Bill safeguarded the public against the destruction of evidence of foul play, and regulated the conduct of licenced establishments for the incineration of human bodies. The Bill was passed through the Legislative Council in 1886, thanks to the able advocacy of Dr. Creed. It did not reach its second reading in the Assembly. After many vain attempts to press the matter on, a society was founded in 1889, but failed in its object of awakening public interest, and dropped out of existence after a short and uneventful life. Dr. Creed, however, did not lose sight of the goal he had in view in 1886, and in 1908 he formed a new society, under the name of the Cremation Society of New South Wales. This society has done good work in familiarizing the public with the advantages of cremation, utilizing the machinery of lectures, discussions at public meetings, and the distribution of pamphlets and other forms of literature.

In July, 1909, the Medical Officer of Health of Sydney, Dr. Armstrong, urged that a crematorium should be provided. He pointed out that there was general agreement that this was a desirable measure of reform in the method of disposing of the dead, more especially for a city like Sydney, the cemeteries of which were being overcrowded. He regarded cremation as the most sanitary method. While the local authorities and the trustees of existing cemeteries had power to erect and maintain crematoria, it was preferable to leave the initiative to the Government. Shortly after this, the Council of New South Wales Branch of the British Medical Association passed the following resolution:—

> "It is the opinion of the Council of the New South Wales Branch of the British Medical Association that, subject to regulations being made, adequately safeguarding the certification of the cause of death, crematoria should be established by the proper authorities."

In October of the same year, the unanimous vote of a large public meeting urged the Premier to provide on the year's estimates a sum of money sufficient for the erection of a crematorium, and pointed out that it was unnecessary to await fresh legislation for the purpose of carrying this reform into effect. Promises were given year by year by the Premiers, but no action was taken. In September, 1911, the Acting Chief Secretary announced in Parliament that the Government had determined to place the sum of £5000 on the draft estimates for the erection of a crematorium, but when the Chief Secretary, Mr. McGowan, returned from England, the draft estimates were presented, and it was found that this provision had been omitted. In 1912, the Hon. G. Black presented on behalf of the Cremation Society a petition signed by 14,000 citizens to the Legislative Assembly. This petition urged the Government to grant £5000 for the purpose. Promises were again forthcoming, but no action resulted. Later a petition with 1500 signatures was presented to Mr. G. H. Reid, for the same purpose, and with the same result. Ministers and Government were prepared to keep the advocates of hygienic disposal of the dead quiet by giving promises, but it would seem as if there was no intention on their part to fulfil these pledges.

At present, the members of the Cremation Society have realized the uselessness of endeavouring to move Ministeries to institute this important reform, and have, therefore, changed the plan of campaign. A company is being formed for the purpose of erecting a small crematorium in the neighbourhood of Sydney. It is probable that a sufficient capital will be subscribed to enable this company to carry its programme into effect. Experience in other countries teaches that when properly conducted private crematoria return a fair interest on the expended capital.

It is unnecessary to argue the point before a medical forum. Since cremation has the hygienic advantages of destroying infective material, of preventing putrefaction from contaminating soil, water and air, and of limiting the dangers of infection to the period of life, since it overcomes the difficult problem of the overcrowding of cemeteries and erection of new ones in and around large cities, since it facilitates the detection of crime, if the usual safeguards are adopted, and since it is economical in regard to both space and capital outlay, and not unduly expensive to those responsible for the disposal of the dead, it may be held that the duty would devolve on the Government to provide suitable apparatus, just as the State has to provide sites for earth burial. On the other hand, it is perhaps better for the public if this reform should be introduced by private enterprise, especially if those acting are not aiming at making a large profit.

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THE SYDNEY HOSPITAL.

A great deal of noise has been made recently in regard to the public hospitals being for the whole community without distinction. The argument used was that the hospitals were erected out of the funds of the community, i.e., the State, and were maintained to a very large extent in the same manner. It has been pointed out in these columns on several occasions that as long as the charitable public contribute even to a small degree to the upkeep of the hospitals, these institutions shall be regarded as places where persons who cannot pay for the treatment elsewhere will receive skilled medical or surgical attention. There are many reasons why this long-standing practice shall not be disturbed. With these reasons, however, we are not concerned at present. But it is necessary to point out how far the Government is from taking over the New South Wales hospitals, and what slender grounds the Minister for Public Health has for wishing to throw the doors of these institutions open to all-comers.

"He who pays the piper calls the tune," is the argument used. On another page of this issue will be found an abstract from the annual report of the Sydney Hospital for the year 1914. In that year, the expenditure was approximately £5000 more than in the previous year. The income on the other hand was approximately £2700 less than in 1913. On the one year's figures there was a balance of expenditure

over income of close on £2800, while on the second year the expenditure was more than £5500 in excess of the income. These figures suffice to show that there was a real need for a special effort to be made to adjust the financial arrangements of this large and highly important hospital. The Government has failed to come to the rescue. It may be admitted that the State Treasury is heavily handicapped at present, but this was not the case in 1913 and in the first half of 1914. In the former year, had the Labour Government been true to its principles of State support for the public hospitals, a further £3000 should have been found. And in the year 1914 some expedient should have been used, rather than that the Board of Directors should be forced to turn to the charitable public with the appeal for more money.

At a meeting of the A.W.U., held on February 25, 1915, an extraordinary resolution was passed. The wording was as follows: "Whereas the wealthy section of the community will not voluntarily stand up to their obligations in contributing to the maintenance of hospitals, this convention urges the Government to immediately take control and finance same." The logic of this body is as little sound as it is grammar. On the evidence of the annual report of the Sydney Hospital, it is the Government that has failed to support in an adequate manner this great institution, and we are convinced that the wealthy citizens of the metropolis will see their way to help the Hospital through its time of stress, not as an obligation, but out of pure charity.

The other side of the picture is just as striking. It is claimed that the support which the subscribers and public give to the hospitals is insignificant, and that the great burden falls on the shoulders of the Government. In 1913, the charitable public and the patients provided over 37 per cent. of the income of the Hospital, and in 1914, when every citizen worthy of the name was making substantial contributions to his country's coffers in a time of national emergency, this proposition still worked out at 30 per cent. Dual responsibility and dual effort are rarely successful. One of the parties tends to leave too much to the other. This applies to the question of hospital support. As soon as the charitable public find that money is being taken from the levies of citizens for a particular purpose, the voluntary efforts to keep these institutions going diminish. The effect of a Government subsidy tends to lessen the inclination of the public to subscribe to hospitals. But notwithstanding this tendency, the maintenance of the Sydney Hospital is only defrayed by the Government to the extent of about two-thirds. To speak of an insignificant contribution by the charitable public is misleading. Unless we are greatly mistaken, the next twelve months will teach the Government that the public of Sydney is quite willing to perform the task the Government has failed to accomplish, namely, to free the hospital from the burden of a large debt and of an uncomfortable deficit.

DOCTOR'S MOTOR CARS.

A by-law exists in Auckland rendering persons who allow their motor-cars to stand unattended for over one hour in the certain streets, or over fifteen minutes in other thoroughfares, liable to a fine. The City Council is desirous of keeping the streets of the capital tidy-looking, and it may be is not unwilling to utilize a constant habit as a possible source of revenue. The effect of this stringent rule to the medical profession would be distinctly undesirable. Medical men are notoriously careless of the time they spend with patients who require special attention, and in the case of an operation it would certainly spell disaster if the surgeon had to leave his patient after 14½ minutes, because his car was standing below unattended. It is probable that the wiseacres of the Auckland City Council did not consider these nice points when framing the rule. The Auckland Division (New Zealand Branch) of the British Medical Association, aided by the Auckland Automobile Association, have brought them to the notice of the Finance Committee of the Council, and we trust that the effect of the deputation will be the withdrawal of an impracticable and unreasonable by-law. Even the general public might have real difficulty in complying with its terms. A promise was given to the members of the deputation that the representations would be considered.

The Council of the New South Wales Branch of the British Medical Association has recently had under its consideration the returns made by members holding Friendly Society Lodge appointments of the "Tabulated Statement of Friendly Society Lodge Appointments held on December 31, 1914." From the analysis of these returns, it appears that about 85% of the Lodge appointments are now held under the Common Form of Agreement between Medical Officer and Friendly Society Lodge approved by the Branch. This is a very gratifying state of affairs, and it is hoped that it will not be very long before the remaining Lodges will recognize the advantage of accepting the new conditions.

The Library of the Queensland Branch contains spare copies of the *British Medical Journal*, *Australasian Medical Gazette*, and *Medical Journal of Australia* for 1914. Members desiring to replace lost numbers of these journals can obtain the missing copies on application to the Hon. Secretary, Queensland Branch, British Medical Association (Adelaide Street, Brisbane).

Naval and Military News.

The British War Office has intimated by cable to the Defence Department of the Commonwealth Government that 100 medical practitioners are required as soon as possible for service with the Royal Army Medical Corps in Europe. The qualifications for these billets are that the men are single, and are physically in good condition. They should be under 40 years of age. The terms offered are: First-class passage to England and back, outfit allowance of £37 10s., and 24s. pay a day. A bonus of £60 will be paid at the conclusion of the term of service, if carried out satisfactorily. The officers will bear the temporary rank of lieutenant in the R.A.M.C., and will be required to serve for 12 months, or for the duration of the war. Senior medical students are urged to continue their studies, and to complete their courses, in order that they may become duly qualified practitioners, and if necessary take up service as medical officers at a later date.

According to the *New Zealand Herald* of February 18, 1915, the nurses selected for the New Zealand Nursing contingent will proceed to England without any preliminary training. This decision is due to the fact that all the nurses accepted have already undergone full training,

and are certificated. The contingent will be placed under the charge of a Samoan nurse, who will act as Matron; ten nurses will have the rank of Sisters, and the remainder that of Nurses. The Matron receives £150 per annum; sisters receive £120, and nurses £100. The outfit is free, and where meals and residence are not provided, a daily allowance of 3s. 6d. will be paid.

The following notice appears in the District Orders of the 2nd Military District, No. 20, under date of February 26, 1915:—

Inoculation and Vaccination.

5. The appended instructions and ruling of Commonwealth Crown Solicitor on the subjects marginally noted are published for information and necessary action:

Enlistment of Men in A.I. Force.

(Defence Circular No. W.L. 14467).

Before enlistment in the Australian Imperial Force each applicant is to be asked the question,—

"Are you prepared to undergo inoculation against small-pox and enteric fever?"

This question is to be inserted on the attestation paper as question 15.

The answer thereto will be recorded on the attestation paper, and any man who does not answer same in the affirmative will not be enlisted.

The attention of the recruit should be specially directed by the enrolling officer to the importance of this matter.

This question will also be put to every member of the A.I.F. now in camp, and any men who do not consent to be so inoculated will be at once discharged.

Instructions are being issued by the DirectorGeneral of Medical Services regarding the inoculation of all members of the A.I.F. before embarkation. Commanding Officers will be held responsible that such instructions are strictly complied with.

Should any man, after answering the above question in the affirmative refuse to be inoculated, any pay due to such member will be withheld, and a full report of the case is to be submitted to headquarters with a view to the prosecution of the man for obtaining or attempting to obtain money under false pretences."

Vaccination and Inoculation, A.I.F.

With reference to Defence Circular No. W.L. 14467 of 14th January, 1915, relative to the inoculation and vaccination of members of the Australian Imperial Force, the following action is to be taken in connexion with men who refuse to submit to inoculation or vaccination after having answered question 15 (vide above-mentioned Circular) in the affirmative:—

(1) All pay due to them is to be withheld.

(2) They are to be ordered, in the presence of witnesses to submit to inoculation or vaccination as the case may be.

(3) Should they still refuse they are to be tried by District Court-Martial for an offence against Section 9 (2) of the Army Act.

(4) After the conclusion of any sentence which may be imposed upon them such men are to be discharged.

Attention is directed to the attached copy of an opinion of the Attorney-General 's Department, dated 13-2-1911, in which it was ruled that an order to be vaccinated is a lawful command which soldiers are bound to obey. This opinion also applies to an order *re* inoculation against typhoid fever..

[Copy.]

Vaccination of Permanent Troops.

OPINION.

The Secretary, Department of Defence, forwards the following case for opinion:—

"In November last, on the recommendation of the P.M.O. in Queensland and the Director-General of Medical Services at Headquarters, it was decided by the Military Board that in view of the danger of small-pox in Thursday Island, all soldiers proceeding to that station should be vaccinated, and the following military order was issued:—

Vaccination of Permanent Troops selected for service at Thursday Island.

All Members of the Permanent Force detailed for service at Thursday Island, are to be vaccinated prior to transfer.

Some Gunners stationed in Brisbane, who have been detailed for duty at Thursday Island, have refused to be vaccinated, and I am desired to ask whether the order issued is one to which a soldier of the Permanent Forces detailed for service at Thursday Island is bound to submit, or if a Regulation is necessary, and if so, to request that a Regulation be drafted to give effect to the Board's Instructions."

The order is clearly issued for the purposes of safeguarding the physical health of the Forces, and therefore relates to military duty, and it is not contrary to law.

In my opinion, it is a lawful command, which the soldiers are bound to obey.

(Signed) R. R. GARRAN,
Secretary, Attorney-General's Department.

The Secretary, 13-2-11.
Department of Defence.

Among the names of officers and men of the Royal Navy, Royal Marines, Naval Divisions and Trawling Fleet killed in action or died of wounds between September 19 and December 18, 1914, published in the Official Navy List for January, 1915, are those of two fleet surgeons, two staff surgeons, and five surgeons.

The following appointments to the Australian Army Medical Corps Reserve (3rd Military District) have been gazetted:—

William Perrin Norris to be Honorary Major.

Honorary Captains A. W. F. Noyes, F. H. Langlands, J. Gordon, J. S. Buchanan, W. A. Wood, J. R. Webb, H. R. Maclean, T. H. Boyd, R. C. Brown, H. B. Devine, and J. H. L. Cumpston to be Honorary Majors.

EXPORTATION OF DRUGS FROM ENGLAND.

In the *Commonwealth of Australia Gazette*, No. 16, under date February 27, 1915, a proclamation by the King is published dealing with the prohibition of exportation of "warlike stores." Previous prohibitions are revoked, and a fresh list is substituted. This list includes a number of substances of general importance, as well as certain drugs. The following drugs cannot be exported from England to any other country:—

Acetanilide, Acetone, Acetylsalicylic acid (aspirin), Aconite and its alkaloids, Methylic alcohol, Ammonium sulphocyanide, Antimony, Antipyrine (phenazonum), Belladonna and its alkaloids, Benzoic acid, Benzol, Bromides, Cantharides, Carbolic acid, Caustic potash, Chloral and Chloramid, Coca, Colloidion, Cresol, Diethylbarbituric acid (veronal), Emetin, Ergot of rye, Eucaine, Formaldehyde, Gentian, Glycerine, Henbane, Hexamethylene tetramin (urotropin), Hydrobromic acid, Ipecacuanha, Mercury, Neo-salvarsan, Nitrate of sodium, Novocain, Paraldehyde, "Peptone Witte," Phenacetin, Potassium salts, Protargol, Saccharin, Salicylic acid, Salol, Salvarsan, Santonin, Sulphate of zinc, Sulphonal, Tartaric acid, Thymol, and Trional.

The exportation of the following drugs is prohibited to all foreign ports in Europe, and on the Mediterranean and Black Seas other than those of France, Russia (except Baltic ports), Belgium, Spain and Portugal:—

Bismuth, Camphor, Castor-oil, Iodine, Salts of Mercury, Nitrate of Ammonium, Nitric acid, Nux vomica and its alkaloids, Picric acid, Sulphur, and Sulphuric acid.

A case of leprosy has been discovered in the Mackay district of Queensland. The patient is a South Sea Islander, and has been under observation for a short time for his complaint. Arrangements have been made for his isolation.

A conference was held in Melbourne on Wednesday, February 24, 1915, for the purpose of discussing the date on which the 1914 edition of the British Pharmacopœia should come into force in Victoria. The meeting was attended by representatives of the Board of Health, representatives of the medical profession, and representatives of the pharmacists. We would again urge medical practitioners to mark their prescriptions "to be dispensed in accordance with the British Pharmacopœia, 1898," pending an official announcement.

Abstracts from Current Medical Literature.

PATHOLOGY.

(69) The Etiology and Pathology of Parotitis.

M. H. Gordon (*Report to the Local Government Board on an Experimental Investigation in Relation to Mumps or Epidemic Parotitis*, N.S. No. 98, 1914) after giving a general description of the disease and calling attention to the nervous symptoms, deals with the pathology of the affection and with some experimental investigations carried out on monkeys. Very few instances are on record in which *post-mortem* examinations have been made on persons who have died of mumps with cerebral complications. In one case, recorded by Maxinowitsh in 1880, the right parotid gland was enlarged, dark red, and infiltrated with serum. The surface of the brain was œdematous and stained violet; the sulci and fissures were filled with a semi-fluid serofibrinous exudate. The substance of the brain, cerebellum and cord was hyperæmic. The author states that an increase in the number of blood and cerebro-spinal lymphocytes is present in mumps. In recording the results of his experimental researches, he says that out of 10 monkeys inoculated with filtered material from cases of the affection, four died, one developed an illness, from which it recovered, and five appeared to be unaffected. The injections were made intra-cerebrally. The filtered material was obtained from the saliva washed out in 0.9% saline solution. He failed to pass the illness on to other monkeys from those infected. The symptoms in the monkeys made their appearance one or two days after the inoculation. They became irritable, but did not reveal any paresis or paralysis. Great prostration and marked general weakness was seen. These symptoms point to meningeal irritation. In all four monkeys which died the meninges and the brain cord substance were congested. No pus or tubercle bacilli were found, and the cultures made remained sterile. The pia-arachnoid was infiltrated with lymphocytes to a variable extent. In places, the hyperæmia of the brain and cord had led to the rupture of small capillaries and to small hæmorrhages. No perivascular infiltration such as is met with in polio-myelitis was met with. Chromatolysis and vacuolation of some of the nerve cells in the cortex and in the cord were seen. The parotid glands in three of the four monkeys were unaltered, but in the fourth there was an acute interstitial inflammation. These experiments have led the author to conclude that the disease is caused by an ultra-microscopic virus analagous to the virus of epidemic polio-myelitis. He suggests that the virus is capable of passing through a Berkefeld filter, since the infecting material was filtered in this way before inoculation. He calls attention to the fact that in the case of monkeys infected experimentally, the incubation period was very short, which is in contrast to the long incubation period of natural mumps. In the second part of the report, the author deals with a fatal illness in children, associated with acute interstitial parotitis. The results of animal experiments in this condition were negative. The symptoms were pyrexia, collapse, diarrhœa, and vomiting. In addition, there were signs of meningeal and perhaps cerebral irritation. There was no evidence of any constant local or general bacterial infection. The lymphatic glands in the mesentery were enlarged, and the lymphoid tissue in the mucous membrane of the ileum, caecum and colon was swollen. The meninges and central nervous system were congested. The most striking feature of the condition was an acute interstitial inflammation of the salivary glands. This was seen in 11 out of 12 of the patients.

(70) Tubercular Infection of the Bronchial Glands.

E. Rist (*Journ. of State Medicine*, January, 1915) calls attention to the relative frequency of caseous bronchial glands in childhood, as compared with their rarity in association with adult tuberculosis of the lungs. In many of the cases in children the whole gland is caseated, whereas with extensive ulcers of long standing in tuberculosis of the adult lung, the bronchial glands may be found of normal size or scarcely enlarged. Instead of being fixed to the surrounding tissues by a strong fibro-adhesive reaction, in the adult they can be enucleated without difficulty, and are rarely affected with caseous degeneration. In 400 adults examined by Ameuille and the author, caseation of the bronchial glands was found in three instances only, in comparatively young individuals. Rist is of opinion that in many cases in which these glands are tubercular in children, the lesion heals, leaving scars formed of small hyaline masses more or less hidden in some part of the gland. From the peripheral fibroid tissue, bundles penetrate into the central caseous mass, until eventually a sclerotic formation of the gland results. Typical tubercular follicles gradually disappear in this slow process. Rist states that caseation of the bronchial glands is not so much a specific character of childhood as of a primary tubercular infection. The reason why pulmonary tuberculosis of the adult is as a rule not accompanied by caseation of the corresponding bronchial glands is not due to the lymph glands of the adult being essentially and physiologically different from those of the child, but simply because pulmonary tuberculosis of the adult is due to a re-infection. In the adult, some microscopical differences from the normal gland can be detected, although no pronounced changes can be made out. The gland is transformed into a mass of little cells of epithelioid type, which differ in some respects from the epithelioid cells of a typical tubercular follicle. Caseation is found only in minute microscopical spots.

(71) Mycosis Fungoides.

MacCormack (*Proc. of the Royal Society of Medicine*, Vol. 7, June, 1914, Derm. Section) describes the microscopical appearances of tissues from three cases of *Mycosis fungoides*. He considers that the appearances are not of a sufficiently definite nature to enable a definite diagnosis to be made on the microscopic evidence alone. He states that the most characteristic feature consists in the accumulation of cells of a rather indefinite type in the papillary and sub-papillary layers. Acanthosis is apparently not a constant feature in any stage of the disease. In one case well-marked giant cells, as definite as those of tuberculosis, were present, even in the preparations made from an erythematous (pre-mycosic) patch. In this particular patch the characteristic infiltration was quite definitely present. The appearances described by Unna were seen to be fairly well marked. In regard to the relationship of this disease to the sarcomata, he says that there is definite evidence that it does not belong to this group. Sections stained by Beckton's method for Altmann granules (fixing in weak formol-Müller, staining with aniline acid fuchsin, and differentiating with picric acid-alcohol) demonstrate the presence of these granules in the cells. This test is an exceedingly important and accurate one, enabling a distinction to be made from the cells of sarcoma and certain carcinomata where the granules are absent. In the treatment of the disease, he regards its ready response to X-rays as being very much against any relationship with syphilis, since X-rays usually aggravated the skin condition in this disease.

(72) Stomoxys Calcitrans as a Carrier of Disease.

Many articles have recently appeared in connexion with the possible spread of anterior poliomyelitis by *Stomoxys calcitrans*, and also of the supposed organism of pellagra. A further contribution, consisting in an article by J. T. C. Nash (*Public Health*, December, 1914, p. 54) contains evidence of the possible parts this fly may play in the transmission of these two diseases. Nash points out that *Stomoxys* can fly to two to three hundred yards from its breeding place, and also that, by following a horse, pony or trap on a hot day, it can easily cover several miles between villages, thus accounting for the circular incidence of various cases. In this way milk carts may convey infection on their rounds. He points out that the maximum prevalence of this disease in summer suggests either dust-borne or fly-borne infection.

PÆDRIATRICS.

(73) Status Lymphaticus.

Though it was recognized in the seventeenth century that an enlarged thymus might cause sudden death, Paltauf, in 1889, was the first to formulate the conception of a constitutional disorder manifested by hypertrophy of all the lymphatic structures of the body, including the thymus

gland. This *status lymphaticus* was evidenced by enlarged thymus, hypertrophy of the tonsils and the lymphatic tissues of the naso-pharynx, enlargement of the lymphoid tissues at the base of the tongue, hypertrophy of Peyer's patches and solitary follicles of the intestine, enlarged spleen and hypoplasia of the aorta. Those suffering from this disease were especially liable to infection and to sudden failure of the vital functions. Thursfield (*British Jour. of Children's Dis.*, November, 1914) recognizes two main classes of case: (1) Those with thymic dyspnœa, due to pressure by the enlarged gland (10-12 grammes and over) on the vital structures in the upper aperture of the thorax. These cases are rare in the author's experience, enlarged deep glands being probably the cause of the symptoms in many of the reported cases. (2) The sudden deaths, whether in infants previously healthy or in those suffering from some trivial disorder, or in patients who expire without warning under an anæsthetic. Besides these two groups, the condition is found in sudden death occurring in the course of certain diseases not usually fatal, *viz.*, in certain eczematous conditions of infants. Enlarged thymus also is found in *myasthenia gravis*, Addison's disease, leukæmia, and Graves' disease. The diagnosis is of extreme importance, as the condition so often leads to tragedy. The enlargement of the thymus is the most constant feature. This is recognized as a V-shaped area of impaired resonance over the *manubrium sterni*, extending from ½ to ¾ inch on either side and downwards to join the cardiac dulness. In addition, there may be unexplained attacks of dyspnœa or a persistently low vitality, as shown by subnormal temperatures and intolerance of exertion. The condition is almost certainly a disorder of the ductless gland system, and therefore it is legitimate to expect something from the employment of an extract with a profound action on this system. Pituitrin should be given to obviate the results of shock, and also before giving an anæsthetic when the condition is suspected, and in cases of thymic asthma.

(74) Infantile Scurvy.

This is a disorder characterized clinically by hæmorrhages into the gums, sub-periosteal tissues of the long bones, etc. Hess and Fish (*Amer. Jour. of Children's Dis.*, Dec., 1914) have studied the cause of the bleeding, both as regards the blood and the blood vessels. From various tests they found that the clotting power of the plasma was slightly diminished. This was not the result of an insufficiency of calcium, nor was antithrombin increased. Blood platelets were present in normal numbers. The blood in other respects had the characters associated with an ordinary secondary anæmia. There was a relative and absolute deficiency in hæmoglobin, a few nucleated red cells and a moderate leucocytosis. As these changes were not sufficient to explain the hæmorrhages associated with the disease, the integrity of the blood vessels was investigated by the "capillary resistance" test. This consists in subjecting the capillaries and vessels of the arm to increased intravascular pressure by means of an ordinary blood pressure band and in observing whether this strain results in the escape of blood through the vessels. The vessels of normal infants were found to stand without apparent disturbance 90° of pressure for three minutes, whereas the vessels of infants suffering from scurvy gave way under this pressure, pointing to a weakness of the vessel walls in this disease. Numerous petechial hæmorrhages of the skin or mucous membranes are frequently noted as one of the earliest signs of the disease. A large majority of scorbutic infants were found to suffer from the condition described by Czerny as the "exudative diathesis," and this diathesis, in the authors' opinion, predisposes to the development of scurvy. They also deal with the question of diet. Scurvy developed in children fed on malt soups, pasteurized and sterilized milks and cereal foods. Raw cow's milk, though not possessing potent anti-scorbutic properties, contain sufficient of the essential substances to prevent scurvy developing. Orange juice was found not to lose its efficacy on being boiled for ten minutes, and the juice of orange peel was successfully substituted for the orange juice itself. Potato proved an excellent anti-scorbutic. If added to pasteurized milk as potato water instead of barley water, the necessity for giving orange juice would be obviated. Cooked root vegetables did not prevent scurvy from developing. Cod liver oil and olive oil were useless as anti-scorbutics.

(75) Internal Hydrocephalus.

Dandy and Blackpan (*Amer. Jour. of Dis. of Children*, December, 1914) have made a close study of hydrocephalus, both from the experimental and clinical point of view. Firstly they proved that internal hydrocephalus would result from a simple mechanical occlusion of the aqueduct of Sylvius, that cerebro-spinal fluid was formed in the ventricles more rapidly than it was removed, and that a patent aqueduct of Sylvius was necessary for its escape. Secondly, low obstruction of the *vena galena magna* resulted in internal hydrocephalus, whereas high ligation had no such effect. They decided that cerebro-spinal fluid was formed in the ventricles, and there was little doubt that the choroid plexuses (possibly including the ependyma) produced this fluid, whether by secretory or mechanical means it was impossible to say. Fluid was readily and rapidly formed by the induction of venous stasis, and when the collateral circulation was insufficient, increased production might be continuous, with resulting hydro-cephalus. The similarity of the saline content of the blood and cerebro-spinal fluid seemed to prove that filtration was partly responsible for the fluid production. Again, the histological character of the choroid plexus epithelium, the difference of the chemical composition of the cerebro-spinal fluid and that of the blood and other serous fluids, and the protection of the cerebro-spinal fluid from substances in the blood (impermeability) necessitated the assumption of a cellular or secretory activity. As regards absorption of the cerebro-spinal fluid, the authors proved, by means of injections of phenolsulphonephthalein, followed at varying intervals by urine examination, that there was an active circulation of the fluid. For from 3 to 4 hours absorption was fairly regular, and probably the fluid was completely absorbed and renewed every 4 to 6 hours. Absorption took place directly into the blood, from the whole extent of the sub-arachnoid space, through its capillary network. No absorption took place from the ventricles. The channels of communication between the ventricles and the sub-arachnoid space were the aqueduct of Sylvius and the foramina of Magendie and Luschka. Normally, after its introduction into the ventricles, phenolsulphonephthalein appeared in the urine in from 10 to 12 mintues and during 2 hours from 12 to 20% was excreted. After introduction into the sub-arachnoid space it appeared in the urine in from 6 to 8 minutes and 35 to 60% was excreted in 2 hours. The drug passed rapidly from the ventricles to the sub-arachnoid space, and appeared in the spinal fluid in from 1 to 3 minutes. Two groups of cases of hydrocephalus were differentiated: (1) Those with occlusion of the communicating foramina, and (2) those with the foramina patent. The former type of hydrocephalus resulted because the cerebro-spinal fluid could not escape from its place of origin in the ventricles, where the absorption was negligible to the sub-arachnoid space, where absorption normally occurs, because the channels of communication were occluded. In these, the phenolsulphonephthalein, after injection into the ventricles, was excreted in the urine but slowly and in small amount. In group II. the communication between the ventricles and the sub-arachnoid space was patent, but absorption from the sub-arachnoid space was greatly diminished. This diminished absorption was responsible for the hydrocephalus. Probably in these cases the sub-arachnoid space was much diminished by adhesions, due to old meningitis. Besides meningitis, the following were probably causal in producing internal hydrocephalus: (1) venous stasis due to obstruction of the small or large venis of Galen, by pressure, thrombosis, tumour, etc.; (2) syphilis, by producing a lesion involving the cerebro-spinal spaces and causing a diminished absorption of fluid, either by occlusion of the foramina or affection of the meninges; (3) trauma; (4) congenital defect. Treatment depended on the type of case. Operation to remove obstruction was indicated in group I., and to increase the area for the absorption of fluid by drainage into other tissues, for the communicating type.

PROCEDURE AT MEETINGS.

The formation and recognition by the British Medical Association of the Federal Committee, and the proposal to hold medico-political meetings in connexion with the Australasian Medical Congress or its substitute, begins a new chapter in the history of medical meetings in Australia. The experience of large meetings of the Branches and of other meetings at which questions of principle are discussed teaches that business is impeded and issues often confused when the rules of debate and procedure of the meeting are not clearly set out in standing orders and rigidly adhered to. It has been found in the Representative Meetings of the British Medical Association in England that the adoption of carefully-thought-out standing-orders is quite essential for the proper conduct of the meetings. After many experiments in various bodies, it has been determined that the best basis for practical standing-orders governing a meeting like the Representative Meeting are those in use in the British House of Commons.

It is proposed in the following to set forth the more important details of these standing-orders, as adapted to medico-political meetings. The object is to render rules of this kind familiar to men who have been in the habit of claiming great freedom in debate, in the hope that some rigid rules will be utilized in the meetings of the British Medical Association held in connexion with the Congresses, and perhaps also in meetings of the Branch or of the medical profession in various States and localities, when important matters have to be decided.

The order of business may be dismissed briefly, chiefly because some order is followed at the present time by all the Branches in the Commonwealth, and also because less difficulty arises in this connexion. The order of business is determined by the Secretaries and Chairman before the meeting, and are set forth on a business or agenda paper.

Procedure is not so readily dismissed. One of the most important matters in regard to procedure is the taking and recording of minutes. A certain amount of confusion appears to exist in the separation of an account of the meeting from the minutes. Minutes should contain a record of every motion or amendment proposed and seconded and put to the meeting. Motions proposed and not seconded are ruled out of order on this account, and are therefore not included in the minutes. The wording of each motion or amendment recorded in the minutes should correspond to the wording of the motion or amendment put to the meeting, and should never be altered or modified at a later date. There are many methods of recording the minutes of a meeting. Some of these are satisfactory, while others in view of their length, are cumbersome. In our opinion, minutes are best compiled on the following scheme: In the first paragraph, the place, date and nature of the meeting are set out. In the second, the name of the chairman and the names of the members present are recorded. Following this, the various motions proposed are given. It is sufficient if there motions are set out in the following form: "Proposed by Dr. X, seconded by Dr. Y, and RESOLVED: (*Here follows the wording of the motion*)"; or "Moved by Dr. X, and seconded by Dr. Y: (*Here follows the wording of the motion*), Whereupon an amendment proposed by Dr. N, and seconded by Dr. M (*Here follows the wording of the amendment*) was put to the meeting, and was carried (or lost)." In the latter case, it is necessary for the records to contain the fact of the passing or negativing of the amendment, moved as a substantive resolution. When voting is carried out by the taking of a count, the numbers voting for and against should be recorded in the minutes. No questions, points of order or other incidental matter has any place in the minutes, but when the Chairman gives a ruling which may be regarded as a precedent, this should be recorded.

Another important point in procedure has to do with the presence of a quorum. No meeting can commence until the chairman has satisfied himself that a quorum is present. During the course of a meeting, the validity of any resolution passed may be dependent on the presence of a quorum. In some meetings it is necessary for a member to call the attention of the Chairman to the fact that the number of members present is less than that provided for under the definition of a quorum. In other instances, the initiative emanates from the Chairman. Whichever method is adopted, it must be remembered that unless the attention of the meeting is called to the absence of a quorum, it is assumed that a quorum is present, and therefore all résolutions are valid, and cannot be challenged on this score at a later date.

The more important orders are termed "rules of debate." While minor variations are required to suit a particular meeting, it may be assumed that the principles of the chief rules must remain constant. These are: (1) When the Chairman is standing, all members shall be seated, and shall remain seated until the Chairman resumes his seat. (2) Members shall stand when speaking, and shall always address the Chair. Nothing tends to greater disorder than conversation or repartee across the house. If a members desires to receive a reply or explanation from another member, he must seek the reply or explanation through the Chair. (3) No member may address the meeting more than once on any motion or amendment, but the mover of an original motion may reply, and in his reply he shall confine his remarks to answering previous speakers. (4) A motion or an amendment must be proposed and seconded before any debate can take place on it, and once it has been proposed and seconded, it cannot be withdrawn save with the consent of the meeting. (5) Only one amendment may be proposed to a motion. In the Australian Legislative Chambers, an amendment to an amendment can be moved, but this invariably leads to confusion and is less satisfactory than the method of precluding second amendments or amendments to amendments, until the first amendment is decided. If an amendment is lost, the original motion is again before the meeting and a further amendment may be moved; while if it is passed, it becomes the substantive resolution, and amendments to this substantive resolution may be moved and seconded. (6) No motion or amendment may be seconded until the motion or amendment has been handed to the Chairman in writing. It is a frequent experience that the meeting is not clear as to what is being discussed because the wording of a resolution is not definite. One difficulty arises from the method of committing the motion to writing in that bad drafting cannot be improved afterwards. But this difficulty tends to make members more careful in the drafting of their motions. (7) An amendment is valid if it proposes that certain words be deleted from the original motion, or that certain words be added, or that the wording be altered, provided that the amendment is relevant to the subject of the motion. On the other hand, no amendment is valid which is a direct negative to the original motion. Riders must be distinguished from amendments, and should always be moved as separate motions after the original motion has been carried. A rider may modify the significance of a resolution but may not change its meaning. It is at times difficult to determine whether a rider is valid or not, but the Chairman will be guided by his interpretation of the words to be added in their context with the original resolution. (8) On the motion "that the question be now put," or "the previous question" or "that the meeting proceed to the next business" being proposed and seconded, no further discussion shall be allowed, but questions relevant to the meaning of these resolutions may be asked of the Chairman. The Chairman has the right to refuse to accept the closure motion. If the Chairman accepts one of these motions, the motion has to be put to the vote at once, and the subsequent conduct of the debate is determined by the result of the voting. (9) The ruling of the Chairman cannot be challenged, and every member is required to obey the Chairman. (10) On the vote of a three-fourths majority or some other majority to be determined, one or more of the standing-orders may be suspended either on a matter of urgency or for some other valid reason.

Adherence to carefully drafted standing-orders embodying the principles enumerated above tend to expedite the business of a meeting, to lend force to the determinations arrived at and to enable all members to take an intelligent part in the debate. The value of their adoption is so obvious that the point need not be laboured. We recommend the consideration of these matters to the Federal Committee and to the Councils of the various Branches in the Commonwealth.

British Medical Association News.

ANNUAL MEETING.

The Annual Meeting of the Tasmanian Branch was held in the Royal Society's Rooms, Hobart, on February 13, 1915, Dr. G. H. Hogg (the President) in the chair.

In calling on the President for the ensuing year (Dr. Scott) to replace him in the chair, Dr. Hogg said:—

"The year which has just finished has been rather an uneventful one, as far as our Society is concerned. The hand of death has, I regret to state, been heavy upon us. We lament the loss of the Hon. Dr. G. H. Butler, so well known and so highly honoured in this city; of Dr. Seymour Brett, of Strahan; of Dr. Harricks, of Burnie; and to the relatives of all these we extend our sympathy. We have also to record the retirement from practice of Dr. Maddox, of Launceston, the senior member of the profession in the north. The war has called away some of our active members, and our best wishes go with them.

"In the past year a Hospital Commission has been investigating our hospitals, and has brought out a report. While I have no doubt that the Commission has done good work, more especially in demonstrating some of the abuses of norminee boards of management, I am of opinion that the Government made a great mistake, and placed the Commission in an invidious position by limiting the Commission to one man. It should have consisted, at least, of three men; the Chief Health Officer, a senior member of the medical profession of good repute, and, say, a financial member. The proposal, which is hinted at in the report, to throw the public hospitals open to all classes of paying patients is, to my mind at any rate, a somewhat perilous one, and not lightly to be embarked upon; it opens the whole question of a State medical service, for which, at present, Australia and Tasmania are not ripe. The subject is one fraught with danger alike to the public and the profession. There is much to be set right in the administration of our hospitals, asylums and health departments generally, but the onus rests with the Governments of the States, who have never, either in the past or the present, sought to consult the representative opinion of our profession. Last year I mentioned some of the more pressing matters requiring attention, but, so far as I know, nothing has been done in regard to them. If the Government heartily wishes to introduce reforms it cannot do better than enlist the sympathy of the British Medical Association.

"I have now much pleasure, gentlemen, in introducing to you, Dr. Scott, your new President. He is too well known to you to require any eulogium of mine. I have to thank him for his kindness in taking my place so often in my absence, and also the various officers, more especially, I think, we all owe very much to our Honorary Secretary, who has done the lion's share of the work. In Dr. Brooks, as Honorary Secretary, we have been singularly fortunate; unbiassed by any personal motives, simply for the love of the profession, he has devoted much time and energy to the interests of the Association. I regret that we are shortly to lose his services."

Dr. Scott, in taking the chair as President, thanked Dr. Hogg for his remarks and the members for their kind reception.

The following were appointed the Office-bearers for the current year:—

Vice-President and President-Elect for 1916: Dr. G. E. Clemons.

Honorary Treasurer: Dr. Guy Bailey.

Honorary Secretary: Dr. Jas. Sprent.

Members of Council: Drs. G. E. Clemons, G. Sprott, A. H. Clarke, W. W. Giblin, G. M. Anderson, R. G. Scott, G. H. Hogg and Honorary Secretary (*ex officio*).

Honorary Auditor: Dr. A. H. Clarke.

Delegates to Federal Committee: Drs. G. E. Clemons and G. Sprott.

The Honorary Secretary and Treasurer presented the usual balance sheet and report.

MEDICO-POLITICAL.

A meeting of the Council of the Victorian Branch was held in the Medical Society Hall on February 24, 1915, Dr. A. Honman (the President) in the chair.

The fees payable to medical practitioners under the Workers' Compensation Act were considered, and four resolutions were passed favouring increases in the fees in certain cases. These resolutions were forwarded to the Commissioner. It was found that there was a very pardonable ignorance on the part of members as to the scope and application of the Act, and the Legislative Committee, which meets on March 1, was directed to draw up an interpretation of the Act, together with a list of the Council's recommendations, and to have these printed and forwarded to members.

The following were elected members:—

A. B. Webb, Bradford.
E. E. Littlewood, Koroit.
Stanley Cochrane, "Edlington," Auburn.
H. R. Dew, Melbourne Hospital.
A. H. Dunstan, Raglan Parade, Warrnambool.

At the request of the Queensland Branch, the subject of the Daylight Saving Scheme was placed on the notice paper of the next meeting of the Council.

The Ethical Committee, having received replies from the Divisions and Branches with regard to advertising, has drawn up a lengthy addendum to the Ethical Principles formulated by the Federal Committee. This addendum is based on that issued by the New South Wales Branch to its members, and will be dealt with finally at next Council meeting and will then be submitted to the members.

A conference attended by delegates of the Branch to advise the State Government as to a suitable date on which the new British Pharmacopœia should come into force advised that it should operate after September 1, 1915, and that a list of alterations should be drawn up and circulated throughout the State. It was further urged that prescribers and dispensers should, as far as possible, adopt the metric system of weights and measures.

At a meeting of the South Australian Branch, held on February 25, 1915, the following motion was carried:—

> "That in view of the evidence frequently coming before us as medical men of the dangers to our troops from excessive alcoholism, and hoping to exert influence toward temperance among them, members of this Branch of the British Medical Association are of opinion that in the present national emergency all medical men will do well to become and remain abstainers during the continuance of the war."

We propose to publish an account of the meeting in next week's issue.

Medical Societies.

(Affiliated with British Medical Association.)

NORTHERN DISTRICT MEDICAL ASSOCIATION.

The Annual Meeting of the Northern District Medical Association (New South Wales) was held on January 27, 1915, at the Council Chambers, Town Hall, Armidale, Dr. C. H. Scott (the President) in the chair.

The following were elected members of the Association: Dr. A. Campbell Smith, Armidale; Dr. W. Ritchie, Armidale; Dr. Louis Birch, Manilla; Dr. E. L. Newman, Scone; Dr. W. M. Phipps, Barraba; Dr. E. R. Rosbey, Delungra; Dr. J. J. Duhig, Bundarra.

The Hon. Secretary, on behalf of the delegate, read a synopsis of the business that had been discussed at the Annual Meeting of Delegates with the Council on October 1 and 2, 1914.

The Hon. Secretary, on behalf of the Hon. Treasurer, presented a statement of accounts for the year ending December 31, 1914, and stated that there was a balance of £34 14s. 9d. to the credit of the Association.

The following Officers and Committee were elected for the ensuing twelve months: President, Dr. L. M. Snow; Vice-President, Dr. H. L. Harris; Hon. Secretary, Dr. T. Sholto Douglas; Hon. Treasurer, Dr. E. W. Buckley; Other Members of the Committee, Drs. A. Campbell Smith, G. B.

Lindeman, B. L. Middleton, J. Darvall Barton, A. J. Corfe, A. J. Mackenzie, R. M. Farrell, G. P. Stanley, T. P. McKell, R. M. Kinross, F. S. Stuckey, L. E. Ellis, W. E. Harris, John Mackenzie, A. H. Coleman, J. A. J. Murray and C. H. Scott; Hon. Auditor, Dr. J. P. Sexton; Delegate, Dr. L. M. Snow; Representative to Council, Dr. L. M. Snow.

The President (Dr. Scott) then delivered his address. He dealt with the work of the Association during the past year, and referred to the various proposals of the Government in connexion with the public health, the provision for maternity cases, the reduction of infantile mortality, the check of venereal disease, bush nursing, cancer research and other matters. In the latter part of his speech, he spoke of the advance which had been made in surgery during recent years, and paid a tribute to the value of Lister's work. In regard to medicine, he expressed the opinion that the introductions of serums in the treatment of disease and the achievements in preventive medicine marked the chief advances in this branch of science.

A vote of thanks was accorded to the President for his very interesting address.

Resolved that the next General Meeting be held in the month of April, and that the arranging of the next General Meeting be left in the hands of the Hon. Secretary.

Dr. W. E. Harris read notes on "Pancreatic Cysts," and Drs. Douglas, Corfe and Campbell Smith took part in a discussion.

Dr. A. J. Corfe read notes on "Case of Double Uterus." A discussion followed, in which Drs. Ritchie, Murray, Snow and Lawes took part.

Dr. Ritchie read a paper on "Retroflexions of the Uterus," dealing with the various causes and contrasting the various remedies and operations. The paper was discussed by Drs. Smith, W. E. Harris and Corfe.

SOUTHERN DISTRICT MEDICAL ASSOCIATION.

The Annual Meeting of the Southern District Medical Association was held at Cootamundra on January 27, 1915, Dr. Shaw in the chair.

It was resolved that a copy of the circular letter addressed by the Council of the New South Wales Branch, dealing with Travelling Ophthalmic Hospitals, be sent to each member.

It was resolved that the Honorary Secretary of the Branch be informed that a rule of the Southern District Medical Association provides that no member of the Association shall sign an agreement as medical officer of a Friendly Society Lodge in which the paying of periodic visits to outlying districts is required, unless a mileage rate of payment or other form of remuneration is granted.

Dr. Stoker was appointed delegate to represent the Association at the quarterly meetings of the Council of the New South Wales Branch.

Dr. J. Allan (Narandera) was elected a member of the Association.

The following were elected members of the Council for 1915: President, Dr. Shaw (Wyalong); vice-president, Dr. Harper (Temora); council, Drs. J. Brennan, D. Buchanan, T. S. Davies, E. Florance, W. Leahy, W. Martin, H. Lethbridge, H. Stoker, K. St. V. Welch, H. Weedon.

Dr. Lethbridge read a very interesting paper on "Some Errors of Private Practice and the Lessons to be Taught by them." A discussion followed.

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Public Health.

SMALL-POX IN NEW SOUTH WALES.

The number of small-pox cases reported to the Department of Public Health, New South Wales, during the week ending February 28, 1915, was:—

	Cases.
City of Sydney and Metropolitan District	3
Newcastle and District	2
Total	5

THE HEALTH OF VICTORIA.

The following notifications have been received by the Department of Public Health, Victoria, for the week ending February 18, 1915:—

Area.	Diphtheria. Cs.	Diphtheria. D'ths.	Scarlet Fever. Cs.	Scarlet Fever. D'ths.	Enteric Fever. Cs.	Enteric Fever. D'ths.	Pulmonary T'b'culosis. Cs.	Pulmonary T'b'culosis. D'ths.
Metropolitan	47	1	5	—	9	—	13	10
Rest of State	38	2	3	—	28	2	4	—
Whole State	85	3	8	—	37	2	17	10

INFECTIVE DISEASES IN QUEENSLAND.

The notifications received by the Department of Public Health, Queensland, for the week ending February 20, 1915, were:—

Diseases.	Cases.
Enteric Fever	30
Diphtheria	28
Pulmonary Tuberculosis	3
Scarlet Fever	3
Erysipelas	1
Varicella	3
Infantile Paralysis	4
Total	72

THE HEALTH OF BROKEN HILL.

The Medical Officer of Health of Broken Hill presented his annual report for the year 1914 to the local authority on February 24, 1915.

The population on January 1, 1914, was approximately 35,000. Owing to the outbreak of war the number of departures by train exceeded that of arrivals by train by 3,100. In addition to this, it is estimated that 1,000 persons left the district by other means. The increase of births over deaths was 726. On the basis of these figures the population on January 1, 1915, is estimated at 31,500. The average is taken at 33,000, and all calculations are based on this estimate.

The number of births registered during the year was 1,246. In 1913 it was 1,395. These figures give a birth-rate of 37.76, and 39.82 per 1,000 of population for the years 1914, 1913 respectively.

During the year under review 520 persons died, of whom 321 were males and 199 females. In 1913 the number of deaths registered was 651. The death-rate in 1914 was 12.73, and in 1913 18.6. The rate in the preceding four years averaged 15.21. Of the 520 persons dying in the year 152 were under one year of age. This yields an infantile mortality of 122 per 1,000 births, as compared with 148.38 for 1913.

The chief causes of death in infants were: Gastro-intestinal diseases, 96; respiratory diseases, 10; prematurity, 24; congenital causes, 5; marasmus, 5; and heat apoplexy, 4. The causes of death among the general population are not subjected to a minute analysis. Enteric fever caused 45 deaths, as compared with 19.75, which is the average for the preceding four years. During the year there were 417 cases of this disease notified in Broken Hill. The figures for 1913, 1912, 1911, and 1910 were 210, 157, 191, and 212 respectively. The Medical Officer of Health calls attention to the fact that these figures indicate that the sanitary conditions of the city are not satisfactory. It is proposed to extend the sealed pan system throughout the district, and this, together with improvements which are planned in the water supply, should effect a lowering of the incidence in 1915.

In regard to diphtheria, 573 cases were notified, and 22 deaths occurred. The average number of deaths for the four preceding years was 14.8. The incidence of diphtheria was highest in 1913 (641), and lowest in 1912 (58). Although 46 cases of scarlatina were notified during the year, no deaths resulted.

The following table referring to the other causes of deaths, is appended:—

Diseases.	1914.	Average of four preceding years.
Hepatic	5	5.5
Tubercular	34	27.75
Malignant	20	15.24
Pneumonia	39	54.49
Other Respiratory	15	16.61
Nephritis	28	26.25
Gastro-Intestinal	29	38.5
Accidents	30	36.75
Senility	17	18.62
Cerebral	12	27.00

It is pointed out that the decrease in the mortality from pneumonia was to a large extent brought about by the closing down of the mines in October and November, which are the months of high incidence of and great mortality from pneumonia.

The Medical Officer lays great stress on the control of the milk supply, and deplores that the fines imposed are so low. The maximum penalty for adulterating milk is £20. There were three prosecutions and three convictions.

THE WATER SUPPLY OF CHILTERN.

A deputation from the Shire Council of Chiltern waited on the Minister on February 24, 1915, for the purpose of calling attention to the serious position of the district in respect to its water supply. It was pointed out that Chiltern had been practically without water for seven months. The Railway Department had been taking water for its own use, and leaving the town without any. No payment had been made for this, and during the past ten years only £10 had been received from the Department. The Council had provided the supply at a cost of £4,500, which sum had been borrowed for the purpose. Repayments to the extent of £6,279, including interest, had been made over a course of years, but the debt of £3,641 was still outstanding. The deputation asked that this sum be remitted. In the second place, it was urged that the Shire Council should be allowed to control its own water supply. An undertaking was given that an adequate supply would be provided. The Medical Officer of Health expressed the opinion that an epidemic would break out, if steps were not taken at once to remedy the state of affairs. The Minister held out no hopes of a remission of the debt, but he promised to have the position investigated.

HEALTH MATTERS IN SOUTH AUSTRALIA.

The Central Board of Health held a meeting in Adelaide on February 22, 1915, at which certain matters of importance were determined. After a maternity home has received a license, and certain appointments had been approved, the sanitary condition of portions of the township of Murray Bridge was reported upon. It appears that defects had been discovered, and, at the instigation of the inspectors, these had been remedied. A report was received in regard to some offensive odours complained of at Stockport. An outbreak of diphtheria in Mount Gambier East occupied the attention of the Board, and it was decided to appoint a medical officer of health, as required by the Act. The question of dealing with contacts in the case of diphtheria infection was also discussed.

SMALL-POX ON THE *URLANA*.

It is reported from Melbourne that two cases of variola have been discovered on board the *Urlana* on its arrival in Hobson's Bay on February 26, 1915. The steamer, which belongs to the British-India Company, has come from Calcutta. During the voyage, two of the Lascar crew sickened. As the condition of the men was serious, the vessel put into Fremantle. The patients were landed and taken to hospital. One of them has since died. The *Urlana* is now in quarantine in the Bay. We are not yet in a position to state whether the passengers and crew will be held in quarantine in the vessel or in one of the quarantine stations. The period of quarantine will be calculated from the time the two patients were landed.

SMALL-POX ON THE RUNIC.

It is reported from Adelaide that the quarantine restrictions which were imposed on the outbreak of small-pox among the passengers of the *Runic* were removed on February 19, 1915. It is satisfactory to note that no further spread of the infection from this source has taken place within the Commonwealth.

Vital Statistics.

VICTORIA.

The Government Statist of Victoria has issued the preliminary returns of vital statistics for the State for the year 1914. The number of births registered during the year was 36,225, which is 247 more than the number registered in 1913. Two thousand and sixteen of the infants born were illegitimate, whereas in 1913, 2,170 infants were born out of wedlock. No less than 149 of these infants were legitimized during the year, which represents 7.35% of the total number.

The number of deaths recorded in the State in 1914 was 16,503, as compared with 15,475 in 1913. The chief increase affected the population of Ballarat and of Melbourne and suburbs. In 1914 8,609 deaths were registered in the metropolitan district, as compared with 7,960 in 1913. In Ballarat and its suburbs 801 deaths were recorded, while in 1913 only 718 were registered. In Bendigo, the number of deaths was actually 14 less than in the previous year. A marked increase in infantile mortality is recorded. There were 2,836 deaths of infants under one year of age in 1914, and 2538 in the previous year. This increased mortality is ascribed to a greater prevalence and severer type of diarrhœal diseases. Five thousand eight hundred and five deaths of persons over 64 years of age were recorded. It will thus be seen that out of a total of 16,503, 8,641 deaths affected the very young and the aged. In regard to the causes of death, it is stated that 1,185 were due to cancer, and 1,228 to tuberculosis. No mention is made of the number of deaths due to affections of the cardio-vascular system. The next most frequent cause of death tabulated is diphtheria, to which 211 deaths are attributed. There were 106 deaths from enteric fever, and 105 from morbilli. Pertussis killed 98, and scarlatina 2 individuals. The Statist calls attention to the marked improvement in regard to the number of deaths from tuberculosis in Bendigo. In 1913 there were 88 deaths from this cause, of which 79 were instances of pulmonary disease. In 1914 the total was 50, and the number of deaths from pulmonary tuberculosis was 46. In Melbourne there was an increase of 21 deaths from tuberculosis, and in Ballarat there was a decrease of 7.

SOUTH AUSTRALIA.

The returns of births and deaths registered in South Australia during the month of January, 1915, have been issued in the South Australian Government *Gazette* of February 18, 1915. The number of births registered during the month was 945, which is equivalent to an annual birth-rate of 2.58%. The average for January during the past five years was 912, and the equivalent average birth-rate was 2.64%.

The number of deaths recorded was 430, 92 affecting children under one year of age, and 173 persons over 60 years of age. The death-rate was equivalent to an annual death-rate of 11.76 per 1,000 of population. In regard to the causes of death 29 instances of notifiable diseases were recorded. Enteric fever caused 11 deaths, diphtheria 9, dysentery 6, morbilli 2, and pertussis 1. There were 4 deaths from tetanus and one from septic poisoning (non-puerperal). Twenty-nine deaths were due to tuberculosis, including 25 due to pulmonary tuberculosis. There were 91 deaths from malignant disease, and 4 from diabetes. Forty-nine of the deaths were caused by disease of the cardio-vascular system. Diarrhœa and enteritis were responsible for 52 deaths, of which 37 affected children under one year of age. No deaths were recorded as being due to puerperal septicæmia. In two cases death was due to accidents of pregnancy (it is not stated of what nature), and in one to "other puerperal diseases or accidents." Premature birth is tabulated against 19 deaths, congenital

debility, icterus, etc., against 16, congenital malformations against 5, and other disease peculiar to infancy against 1.

The number of births registered in the city of Adelaide in the month of January, 1915, was 75, which yields a birth-rate equivalent to an annual birth-rate of 20.76 per 1,000 of population. There were 94 deaths registered in the city. Thirty of these persons were not usually resident in the city, but died in public institutions. The death-rate, calculated as a crude annual death-rate, works out at 25.92 per 1,000 of population, and when calculated as a corrected death-rate at 17.64. The causes of death are grouped as follows: Epidemic, general diseases, 7 deaths; other general diseases, 26; local diseases, 38; malformations, 1; diseases peculiar to infancy, 3; old age, 14; and external causes (violence), 5.

Hospitals.

THE SYDNEY HOSPITAL.

The Annual Meeting of the Sydney Hospital was held on February 23, 1915, Sir Gerald Strickland, the Governor of New South Wales, presiding. The business consisted in the presentation of the report of the President and Board of Directors for the year 1914, together with the balance-sheet and the adoption of the same. In addition, the four retiring Directors were re-elected, namely, Messrs. R. J. Black, J. Garland and J. Gregg, and Dr. Odillo Maher, and the President, Sir Matthew Harris, the Vice-Presidents, Dr. A. J. Brady and Mr. David Fell, and the Honorary Treasurer, Mr. C. J. Garland, were re-elected to their respective offices.

The report contains some important information.

Finance.

Not only has the indebtedness of the hospital increased by £5,508 to the sum of £8,250, but the urgent needs of the different departments could not be satisfied on account of the lack of funds. The European war is stated to have prevented many of the subscribers from giving their usual support. The Government had, it is said, rendered valuable assistance, in spite of the financial burden resulting from the state of war. It had been hoped that a grant of land on the eastern side of the hospital would have been gained, but this had of necessity been postponed. The balance-sheet showed that the total income amounted to about £42,500. This sum was made up of over £4,000 from donations and subscriptions, £4,767 from patients' contributions, £621 from fees of medical officers and students, and roughly £1,000 from interest on rent and invested capital. This represented the sum of £10,562. The Government contributions consisted of £11,700 from "bed subsidies," £5,170 for "£ to £ subsidies," £14,000 for special grants and the balance of £31,940 in respect to smaller items. In other words the Government provided in 1914 just over 75% and the public just under 25% of the income. In 1913, the Government contribution was £7,000 less. The cost of maintenance, etc., was heavy, and in salaries and wages alone an increase of close on £3,000 had to be met. The cost per bed worked out at £116 5s. 7d., as against £103 0s. 6d. for 1913. It is regrettable that this increase should have occurred at a time when the public purse strings are tightly drawn, and when the calls on the charitable public are enormously increased. But in spite of this, in view of the small prospect that the Government will be able to increase its subsidy, the Board felt itself forced to appeal to the public to assist the hospital to bear its increasing burden.

The War.

Two members of the Board of Directors, the Hon. J. B. Nash and Mr. A. J. Onslow-Thompson, the Medical Superintendent and his successor (Drs. Dunlop and Kay), three senior Resident Medical Officers (Drs. Walsaal, Kennedy and Donaldson), three members of the Honorary Medical Staff (Drs. Newmarch, A. Aspinall and Herschel Harris), and a junior Resident Medical Officer had joined the Expeditionary Forces or had taken up service for the Empire in some other way. Reference is also made to the loss sustained by the hospital by the death of Dr. Brian Pockley, who was killed in action at Rabaul.

Changes on the Staff.

Suitable reference is made to the death of Sir Normand MacLaurin, who was for many years Honorary Consulting Physician. Dr. E. J. Jenkins had retired from his position of Honorary Physician, and Dr. Frederick Hall was promoted to his position. Dr. A. H. a'Court had been appointed to the position of Assistant Honorary Physician, to complete the full complement.

Dr. H. S. Warren had been appointed additional Honorary Assistant Aural Surgeon.

Dr. T. S. Dixson had resigned his position at Honorary Director of the Department of Special Therapeutics, and had been appointed Honorary Consulting Physician. Dr. Lane Mullins had been appointed in Dr. Dixson's place. Dr. Paul had been appointed Honorary Assistant Dermatologist in the Radium Department. Several temporary appointments had also been made to fill the positions rendered vacant while the incumbents were engaged on active service.

Statistical Records.

The usual figures are given in regard to the number of patients treated in the hospital, and in the various departments, and a general summary of the work achieved. Much of this information has no practical or scientific significance, and is useful only for the purpose of informing the public of the amount of work which has been carried out during the year. The number of patients admitted during 1914 was 6,533, and the number in hospital on December 31, 1913, was 337, making a total of 6,870 patients treated during the year. Of these patients, 430 died, 138 within 24 hours of admission. Upwards of 4,382 operations were performed. In the Out-Patients' Department, 17,490 patients received attendance, and in the Casualty Department a further 23,837 patients were treated.

The number of patients and number of attendances in the Skiagraphic Department, in the Radium Department, and in the Department of Special Therapeutics, are given, as are the details of the work done in the Pathological Department. An interesting record is to be found in the account of the examinations carried out after death. Permission was obtained to perform post-mortem examinations on the bodies of 129 of the 430 patients who died. This proportion, which is exactly 30%, is unfortunately low. A very excellent rule exists in some European hospitals, where every patient is required on admission, if able to do so, to sign a paper agreeing, among other things, to a post-mortem examination in the event of death occurring in the hospital. When the patient is unable to sign or understand the document, the relatives are asked to sign in his stead. The price paid in this way is very small for the immeasurable advantages gained by skilled gratuitous treatment in the institution, and the gain to science of an accurate pathological record of every case is immeasurable.

Medical School.

During the year, 25 students were enrolled, and commenced their studies in the hospital. The lack of a lecture theatre and of adequate acocmmodation for pathological study is remarked on.

Nursing Staff.

The Assistant Matron (Miss Kellett) and the Theatre Sister (Miss Marshall) had joined the First Australian Expeditionary Force, while three Head Nurses (Miss S. Durham, Miss M. McNulty and Miss B. Crago) had also taken up duty with the colours. A number of nurses had left during the year, and their places had been filled. The staff comprised 122 individuals. Sister Hill had been promoted temporarily to the post of Assistant Matron, and Sister Grant had been appointed temporary Theatre Sister. Head Nurses Doone, Lawrence, Tremayne and Johnston had been appointed Sisters, and Nurse Chapman had been appointed Head Nurse. The lectures and classes for nurses held during the year are given in tabular form. Only two candidates failed to pass the examinations, and these two were allowed to present themselves again, when they satisfied their examiners.

In his speech supporting the motion for the adoption of the report, Mr. J. Garland remarked that the Board was considering the advisability of altering the arrangements appertaining to the position of Medical Superintendent. No fault had been found with the holders of this position during recent years, but it was held that if the appointment of men of riper experience had led to better management in other institutions, it would be wise to adopt this practice in the Sydney Hospital.

BALMAIN AND DISTRICT HOSPITAL.

The annual report for the year 1914 of the Balmain and District Hospital, which is described as an institution primarily for the treatment of accidents and relief for the sick poor, and such other cases as may be recommended for admission by members of the Honorary Medical Staff, has just been issued. The hospital contains 43 beds, of which six are placed in the children's ward and 3 in the isolated ward. During the year 802 persons were admitted, and there were 30 patients in the hospital on December 31, 1913. Of the total of 832, 552 were discharged cured, 73 relieved, and 14 unrelieved; 63 patients had died, and there were 30 patients in the hospital on December 31, 1914; 22 of the deaths took place within 48 hours of admission. Eight hundred and ninety-one operations under general anæsthesia were performed during the year. Three thousand and eighty-three persons were treated in the out-patient department, and 5,876 prescriptions were dispensed in the dispensary. The average cost of maintenance and administration per bed worked out at £86 11s. 6d.

The annual expenditure, inclusive of maintenance and administration, was £3,973. The receipts amounted to £3,865, of which £1,433 were derived from public subscriptions, donations, and proceeds of entertainments, while the Government subsidy for the period 1913 amounted to £1,094, and for the first six months of 1914 to £588.

The Board had had under consideration a proposal for enlarging the hospital, but this matter had been dropped temporarily owing to the large expense which would be entailed.

THE MARYBOROUGH GENERAL HOSPITAL.

That the charitable public is still willing and capable of doing good work for the benefit of the sick poor has been proved again in connexion with the Maryborough General Hospital, Queensland. A new operating theatre has been required for some time past, and the Women's Hospital Guild has made it its business to see that this was provided. Miss S. Rooney, the energetic Secretary of the Guild, and Mrs. Warry, the President, have worked hard and have succeeded in raising about £250 for the purpose. Of this sum, £186 was paid toward the cost of erection and equipment of the theatre, while the Government contributed £374, making up a total of £560. This sum was required for the purpose. The balance of £63 was handed over to the Hospital Committee on February 6, 1915, when the new operation theatre was opened. Dr. H. C. Garde, the Resident Surgeon, has presented the hospital with a new operating table. The Committee of the Maryborough General Hospital are to be congratulated on the kindness and generosity of their friends who are prepared to give time, energy and money for the benefit of the sick poor.

PERTH PUBLIC HOSPITAL.

The need of a new maternity department attached to the Perth Public Hospital has been recognized for some little time. The Government has given this matter its serious consideration, and as a result has determined to proceed with the erection of a suitable building. The Premier stated on January 19, 1915, in the Legislative Assembly, that plans were being prepared, and that as soon as these were completed the building would be commenced.

WARWICK GENERAL HOSPITAL.

The annual meeting of the Warwick General Hospital was held on January 28, 1915. In presenting the annual report, Mr. H. Morris was able to show that the institution had carried out its functions during the year in a very satisfactory manner. Four hundred and ninety patients had received treatment in the wards. Of these 424 had been discharged, either cured or relieved, and 37 had died; seven of the deaths had taken place within 24 hours of admission. The total number of patients was 33 less than in the previous year. The average maintenance cost per diem was 3s. 6d. The expenditure for the year amounted to £2,505, while the receipts amounted to £3,773, leaving a balance of over £1,250. It was announced that Sir Arthur Morran was retiring from the Committee, of which he had been a member for 25 years. He was appointed a life governor in recognition of his valuable services.

THE HOSPITAL AT WHANGAREI, NEW ZEALAND.

A short time ago the Auckland Commercial Travellers' and Warehousemen's Association held a charity concert which proved a substantial success. It was arranged that 60% of the takings should be handed over to the Whangarei Hospital. On February 8, 1915, the Association Committee sent the sum of £137, being the proportion allotted to the hospital. The Government subsidy will bring the amount up to over £300. The Association has not imposed any conditions to the gift, but a suggestion has been made that the money might be spent in the purchase of a motor ambulance. We would wish to call attention to the value of voluntary contributions to the hospital

AUCKLAND HOSPITAL AND CHARITABLE AID BOARD.

At a meeting of the Auckland Hospital and Charitable Aid Board held on February 16, 1915, it was reported that the Medical Superintendent of the Auckland Hospital, Dr. C. E. Maguire, would be replaced by Dr. McGregor Grant during his absence at the front.

Negotiations were reported in connexion with the taking over by the Education Board of some of the endowed land belonging to the Hospital Board at Northcote. The matter was referred to the Financial Committee, as was the question of the transfer of some land near the Royal Oak to the Government. The Government had suggested that this site should be handed over as a gift for the erection of a post office. The chairman presumed that a site of equal value would be offered in exchange.

A proposal to amend the Pharmacy Act to enable students in chemistry to receive part of their training at general hospitals was considered.

It was reported that Professor Champtaloup has been invited to meet the Board in March for the purpose of advising them in connexion with the erection of a pathological and bacteriological laboratory.

TASMANIAN HOSPITALS.

Another Royal Commission has been appointed in Tasmania for the purpose of enquiring into the management of hospitals. On this occasion the Commission will confine its attentions to the General Hospital, Hobart. We understand that the Commission will consist of three members, and that Dr. S. A. McClintock, the Chief Health Officer, has been appointed Chairman.

According to an account published in the *Mercury* of February 20, 1915, much distress is being experienced by the patients in the women's ward of the Queenstown Hospital. The ward is overcrowded, and during the hot weather the patients are having a trying time. It appears that the Public Works Department has received instructions to proceed with the extension of this portion of the hospital. No steps, however, have been taken to carry these instructions into effect.

THE AUCKLAND DISTRICT HOSPITAL.

Blessed with a progressive and generous Hospital Board, the Auckland District Hospital is in the enviable position of moving with the times. The Medical Superintendent, Dr. C. E. Maguire, who has held this position for close on two years and who is now relinquishing his duties temporarily to join the New Zealand contingent in training at Trentham, prior to going to the front, has seen a number of additions and improvements, and is advising the Board in regard to further requirements. The scheme under consideration at present includes the provision of a new laundry, a modern pathological department, a new surgical block to replace an antiquated one now doing service, and

a children's department. The Hospital fills an important need in the city. Upwards of 3600 patients are admitted each year into the wards. The number has increased steadily during the past five years. Hand-in-hand with the increased activity of both medical and surgical sides of the hospital, expansion of the various departments has taken place. The nursing staff has grown not inconsiderably, and the quarters have had to be increased during the past few years. The staff now consists of 114 nurses. In addition to this extension, a special electrical department has been erected, as well as a ward for noisy patients, a mortuary and some other buildings.

HOSPITAL FOR THE INSANE, MONT PARK.

According to the *Age* of February 5, 1915, the Minister for Public Works is calling for tenders for a considerable addition to the accommodation at the Hospital for the Insane at Mont Park. The additional wings will contain beds for 800 chronic patients. A central block will be provided for medical officers' quarters, matron's room, and the observation wards. In connexion with this block will be the kitchens, dining-rooms, and other necessary apartments. The plan on which the observation wards and the male and female blocks will be constructed will give effect to the principle of proper classification and the application of suitable forms of treatment. It is estimated that the new building will cost £110,000.

University Intelligence.

PROPOSED NEW SCHOOLS AT THE NEW ZEALAND UNIVERSITY.

The Auckland University College Council considered at its meeting of February 15, 1915, the advisability of establishing a school of architecture and one of journalism. It was pointed out that during the last five or six years the New Zealand University Senate had not accorded to Auckland its fair and equitable share of the facilities for higher education. Sir Maurice O'Rorke, the Chairman of the Council, sought the support of the members for his scheme for establishing the school of architecture in Auckland. He was not desirous of monopolising the school for Auckland, but the other centres could follow their example. They had lost their School of Mines, and were in danger of losing the School of Engineering. These were additional reasons for the institution of a school for the study of architecture. The motion was carried, and a committee was appointed to examine the matter in detail and to report on the best means of carrying it into effect.

In regard to the second motion, less general support was accorded. It was felt that more information as to the desirability and utility of the proposal should be obtained before a definite decision was arrived at. For this reason, the motion was opposed by the majority, and it was decided to require the Library Committee to advise on the desirability of establishing a school of journalism. It appears that the necessary funds are already available, and it may confidently be anticipated that on close examination the proposal will find favour. A well organized school, where all branches of journalism can be taught efficiently, must tend to raise the standard of general education and improve the quality of work of journalists.

UNIVERSITY OF WESTERN AUSTRALIA.

It is announced that the annual election of two members of the Senate of the University of Western Australia by Convocation will be proceeded with at Perth on March 31, 1915. The nominations, which must be signed by two qualified voters, were due on or before March 3.

UNIVERSITY OF MELBOURNE.

The Senate of the University of Melbourne considered on February 24, 1915, the draft regulations which have been approved by the Council dealing with entrance to the University. The new scheme provides for the recognition of certain schools, which shall be known as *accredited schools*. Scholars at these schools, after completing, to the satisfaction of the inspectors, the full course, are permitted to enter the University, provided that certain examinations are passed. The junior public examination will be done away with, and an intermediate examination will be substituted. In the place of the senior school examination, a school-leaving examination will be instituted. The conditions of entrance to university study will consequently be modified to a considerable extent.

Fathers of twins, triplets, quadruplets, and so on, only receive a single maternity bonus. On this basis, it has been decided that the father who neglects to have his twin children vaccinated is liable for a fine equivalent to the usual fine for a single child. The fine of 30s. is usually imposed in Bendigo for this failure to comply with the law. The father in question was therefore fined 15s. in respect to each of his children.

In South Melbourne, two women were committed for trial on February 24, 1915, for having made a false declaration of birth, with the object of defrauding the Maternity Allowance Department of the Commonwealth Government. In a similar case recently before the Courts, the woman not only claimed the bonus for a child she had not borne, but also succeeded in deceiving her husband by passing off the infant of another woman as her own.

Special Correspondence.

(From our Special Correspondent.)

LONDON LETTER.

The Thermophone.

Monsieur de Lange, of Utrecht, recently gave a demonstration to the members of the Royal Society at Burlington House of a new form of telephone apparatus, which is said to give a more faithful reproduction of sound than the ordinary type of telephone. Monsieur de Lange pointed out that 34 years ago the late Sir William Preece connected a thin platinum wire with a diaphragm, and thereby succeeded in reproducing sound waves of the human voice on the diaphragm. Sir William Preece, however, never realized the great practical value of his invention. The great difference between it and the thermophone was that the latter was not associated with the mechanical operation of a wire, but depended simply and solely on a change of temperature in the wire, which spoke without any diaphragm. Following the process of a Russian experimenter, who, by placing a Wollaston wire in an insulating medium, and then treating the wire with acid, obtained a good thermophone, although it was impossible by this means to convey the required volume of sound, M. de Lange claimed to have succeeded in making the thermophone of practical everyday use by fixing a wire of a diameter of from two to twelve microns in a Gothic curve. The thermophone, he said, listened to in the open air, sounded extremely weak, but as soon as the platinum wire was placed under a cover, which had a small opening or several small openings, the sound at once became clear and distinct. The volume of sound increased in accordance with the decrease in the size of the cover. The size which approximately agreed with the size of the human ear funnel seemed to be the most suitable. Metal covers were better than those of ebony, and by surrounding these with some cooling substance the acoustic effect became doubled. As to the theory of the thermophone, the most he could say was that the decrease and increase of heat in the platinum wire of the telephone took place isochronically with the vibrations in the microphone. The air surrounding the platinum wire was thereby immediately heated or cooled in accordance with the increase and decrease of heat in the wire, and if that air was retained within the closed compass of the cover, the expansions and retractions were noticed as sound.

The Royal Society's Medals.

The King has approved of the following awards being made this year by the President and Council of the Royal Society:—

A Royal medal to Professor Ernest W. Brown, F.R.S., for his investigation in astronomy, chiefly in the lunar theory.

A Royal medal to Professor William J. Sollas, F.R.S., for his researches in balæontology, especially in the development of new methods.

The Copley medal to Sir Joseph Thomson, O.M., F.R.S., for his discoveries in physical science.

The Rumford medal to Lord Rayleigh, O.M., F.R.S., for his numerous researches in optics.

The Davy medal to Professor William Jackson Pope, F.R.S., for his researches on stereochemistry, and on the relations between crystalline form and chemical constitution.

The Darwin medal to Professor Edward B. Poulton, F.R.S., for his researches in heredity.

The Hughes medal to Professor John S. Townsend, F.R.S., for his researches on electric behaviour of gases.

Religion and Science.

Sir Oliver Lodge, the Principal of Birmingham University, delivered a lecture in the Browning Hall, Walworth, on November 22, which has attracted considerable attention on account of the very decided opinions he expressed on the fascinating question of human survival after death. He said:—"We ourselves are not limited to the few years that we live on this earth. We shall go on after it. We shall certainly continue to exist; we shall certainly survive. I say it on definite scientific ground. I say it because I know that certain friends of mine still exist, because I have talked to them.

"Communication is possible. One must obey the laws; one must find out the traditions. I don't say it is easy. It is possible, and I have conversed with them as I could converse with anyone in this audience now. And, being scientific men, they have given proofs that it was really they—not some personation, not something emanating from myself.

"I tell you with all the strength of conviction which I can muster that the fact is so—that these people still take an interest in what is going on, that they still help us, and know far more about things than we do, and that they are able from time to time to communicate. I know this is a tremendous statement—a tremendous conclusion. I don't think any of us, I don't think I myself, realize how great a conclusion it is.

"The conclusion is that the survival of existence is scientifically proved by careful scientific investigation, and that of itself leads us to a perception of the unity running through all states of existence. If you once step over the boundary there is no limit to the higher intelligences until you come to the Infinite Intelligence Itself. There is no stopping. You must go on until you come to God."

Correspondence.

LATENT FRACTURE AND FRACTURE DISLOCATION OF THE CERVICAL VERTEBRÆ.

Sir,—Dr. Chas. F. Warren has very kindly sent me the following account of Case 1 of the series illustrating latent fracture and fracture dislocation of the cervical vertebræ. He saw the patient on the day following the accident, and sent him in to Mr. Bird later.

"The patient was standing on a load of wheat, pulling a rope, when it broke, and he fell backwards on his head, and immediately became unconscious. His brother ran over to him and thought he was dead, but, noticing his head twisted round, gave it a sharp pull and straightened it. He heard it click, and the patient immediately regained consciousness, and complained of intense agony and pins and needles in both arms and legs. He said at once, 'My arms and legs are broken.' He passed a bad night, and was brought in twelve miles to see me next day. I had him put into a private hospital, and he complained of intense neck-ache, which was relieved by ice-packs to the cervical region. I thought the case one of fracture dislocation of the neck, and continued the treatment. About three weeks later he was able to walk, but when his feet touched the ground he got a return of the neck pains."

I am very grateful to Dr. Warren for these particulars, and take this opportunity of placing them on record.

Yours, etc.,

ALAN NEWTON.

41 Spring Street, Melbourne,
February 26, 1915.

THE ROYAL COMMISSION ON HOSPITALS IN TASMANIA.

Sir,—In your issue of February 20, 1915, you published a review of the proceedings of the recent Tasmanian Hospitals Commission. I, for one, forebore to comment upon the evidence and report until some notice had been taken of it by the *Journal*, as, of course, no comment could be made by Tasmanians on your article of September 5, p. 2.5, the matter being then *sub judice*. Now comment is again stifled, as a second Hospitals Commission began its sittings on February 22. Suffice it to say that a second Commission was thought necessary, in which the previous Commissioner has the assistance of two experienced heads of other public departments.

Yours, etc.,

JAMES SPRENT, M.B.,
Honorary Asst. Physician,
Hobart General Hospital.

Hobart,
February 23, 1915.

THEORIES OF HEREDITY.

Sir,—Several recent articles having appeared in the *Medical Journal of Australia* dealing with heredity, I do not propose to weary your readers by expressing fully my own views on the subject. I would like, however, to call the attention of those interested to the Hormone Theory, which, to my mind, explains in great part the gradual evolution of the indivdual from the fertilized ovum to the adult stage, and also gives a rational explanation as to how the soma may influence the germ-plasm, thus rendering possible to some extent the transmission of acquired characters (i.e., additional experience). How potent in guiding cell architecture such chemico-physiological bodies may be is well seen in the analogous action resulting from injuries to plants due to gall-producing insects. The gall formed is, as a rule, as specific in characters as the insect producing it, and the change thus resulting in the tissues of the host is obviously due to some determining chemico-physiological agent. Postulate such bodies (hormones) in the germ cells and secondary hormones as functions of the cells in their somatic progeny of succeeding generations, and ordered ontogeny results. In the Journal of the West Australian Natural History Society (No. VI., Feb., 1909, p. 34, read before the Society, Sept. 22nd, 1908), in an article entitled, "An objection to the Direct Continuity of the Germ-plasm, with a suggestion as to the part possibly played by Hormones in Heredity," I briefly outlined this theory, and also indicated that the continuity of the germ-plasm, especially in the plant world, was much more relative than direct. Mr. J. T. Cunningham, who accompanied the British Association for the Advancement of Science party to Australia, has also written on the Hormone Theory of Heredity (*Archiv. fuer Entwicklungsmechanik der Organismen*, Bd. xxvi., Heft. 3). I have not seen his paper, but it is doubtless much more detailed than my own suggestion.

Yours, etc.,

Sydney, March 1, 1915. J. BURTON CLELAND.

I enclose the only reprint of my paper I now possess, so that should anyone be desirous of reading it they may do so at the office of the Journal.

HEREDITARY OPTIC ATROPHY.

Sir,—I would be glad if you would correct an error which occurs, owing to an oversight of mine, in the proof-reading of my report of cases of Hereditary Optic Atrophy. In line 24, page 190, there appears the statement: "There were apparent signs of trouble of the accessory nasal sinuses." The statement should be: "There were *no* apparent signs," etc.

In a record of such cases the point would be of importance.

Yours, etc.,

151 Macquarie Street, ERIC POCKLEY.
Sydney, March 1, 1915.

Personal.

Dr. Hugh G. Allen has removed to the Union Bank Chambers, Newcastle.

Dr. R. E. McClelland has removed from Newtown to Macksville, Nambucca River, New South Wales.

Dr. Walter Hull, of Macquarie Street, Sydney, left Australia on a visit to England on February 27, 1915.

Dr. Macneill Simpson, of Sydney, has left by the Blue Funnel liner *Anchises* on February 27 for England.

We regret to announce the death of Dr. Albert Bobart, which took place at Mosman on February 19, 1915. Dr. Bobart was the son of a well known Melbourne resident. He studied medicine in London and at the Melbourne University, and graduated in 1889. He served as Staff Surgeon in the British Navy, and subsequently set up in Nowra in private practice. He had retired from practice some years ago.

Dr. Charles Perry has commenced practice temporarily at 54 Collins Street, Melbourne.

The Inspector-General of Hospitals of New Zealand, Dr. T. H. A. Valintine, who has recently made a tour of inspection of hospitals and similar institutions in Great Britain, has returned to Auckland on February 21, 1915, by the *Matatua*. We understand that Dr. Valintine, after having examined a large number of civil and military hospitals, has expressed himself greatly impressed with the completeness and excellence of the organization of the latter.

Dr. H. Hardwick Smith has resigned his position as Medical Superintendent of the Wellington Hospital, New Zealand, after having served for a period of six years. The Hospital Board presented him with an address on his retirement.

Medical Appointments.

Dr. H. M. Prins has been appointed Medical Referee under Section 13 of the Workers' Compensation Act, 1912, at Wickepin, Western Australia, in the place of Dr. P. J. Moloney.

Dr. Katie Ardill has been appointed Honorary Anæsthetist at the South Sydney Women's Hospital, Newtown, New South Wales.

Dr. J. Kennedy has been appointed Officer of Health for the District of Georgetown, South Australia.

Dr. E. A. Brummitt has been appointed Deputy Officer of Health for the district of Walkerville, South Australia,

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenens sought, etc., see "Advertiser," page xiii.

Births, Marriages, and Deaths.

The charge for inserting announcements of Births, Marriages and Deaths is 5s., which sum should be forwarded in money orders or stamps, with the notice, not later than the first post on Tuesday morning, in order to ensure insertion in the current issue.

BIRTH.

DUNN—On February 25, 1915, the wife of W. Alexander Dunn, F.R.C.S.E., Macquarie Street, Sydney—a son.

Books Received.

SURGICAL MATERIALS AND THEIR USES, by Alexander MacLennan, M.B., C.M., 1915. London: Edward Arnold, Crown 8vo., pp. 252. Illustrated. Price, 4s. 6d. net.

AIDS TO PATHOLOGY, by Harry Campbell, M.D., B.S., F.R.C.P., 1915. Baillière, Tindall & Cox; Third Edition, Foolscap 8vo., pp. 228. Price, 3s. 6d.

DISEASES OF THE NOSE AND THROAT, by Jonathan Wright, M.D., and Harmon Smith, M.D., 1915. Baillière, Tindall & Cox; Demy 8vo., pp. 683, with 313 engravings and 14 plates. Price, 21s.

ELEMENTS OF PHARMACY, MATERIA MEDICA AND THERAPEUTICS, by Sir William Whitla, M.A., M.D., LL.D.; Tenth Edition, 1915. London: Baillière, Tindall & Cox; Demy 8vo., pp. 980. Price, 9s.

SYNOPSIS OF THE BRITISH PHARMACOPŒIA, compiled by H. Wippell Gadd, F.C.S., 1915. London: Baillière, Tindall & Cox; Eighth Edition, pp. 196. Price, 1s.

A TREATISE ON HYGIENE AND PUBLIC HEALTH, WITH SPECIAL REFERENCE TO THE TROPICS, by Birendra Nath Ghosh, L.M.S., and Jahar Lal Das, L.M.S., with an introduction by Colonel Kenneth Macleod, M.D., LL.D., F.R.C.S., 1914. Calcutta: Hilton & Co.; Demy 8vo., pp. 384.

Diary for the Month.

Mar. 9.—Tasmanian Branch B.M.A., Monthly and Council Meeting.
Mar. 10.—South Sydney Medical Association, Annual Meeting.
Mar. 10.—Melbourne Pediatric Society.
Mar. 11.—Victorian Branch B.M.A., Council Meeting.
Mar. 12.—South Australian Branch B.M.A., Council Meeting.
Mar. 17.—Western Australian Branch B.M.A., Monthly Meeting.

Covers for binding the *Medical Journal of Australia* for 1914 can be obtained on application to the Manager, B.M.A. Building, 30-34 Elizabeth Street, Sydney. The price of a cloth cover is 2s. and of half leather 2s. 6d.

Important Notice.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
QUEENSLAND. (Hon. Sec. B.M.A. Building, Adelaide Street, Brisbane).	Brisbane United F.S. Institute. F.S. Lodges at Longreach. F.S. Lodges at Warwick.
WESTERN AUSTRALIA. (Hon. Sec. 230 St. George's Terrace, Perth).	Swan District Medical Officer. All Contract Practice Appointments in W.A.
NEW SOUTH WALES. (Hon. Sec. 30-34 Elizabeth Street, Sydney).	Australian Natives Association. Balmain United F.S. Dispensary. Burwood District F.S. Institute. Goulburn F.S. Association. Leichhardt and Petersham Dispensary. M.U. Oddfellows Med. Inst., Elizabeth Street, Sydney. N.S.W. Ambulance Association and Transport Brigade. N. Sydney United F.S. People's Prudential Benefit Society. Phœnix Mutual Provident Society. F.S. Lodges at Braidwood. F.S. Lodges at Casino. F.S. Lodges at Lithgow. F.S. Lodges at Mudgee. F.S. Lodges at Orange. F.S. Lodges at Parramatta, Penrith, and Auburn. F.S. Lodges at Wellington. Killingworth Colliery, Newcastle. Seaham Colliery No. 1, Newcastle. Seaham Colliery No. 2, Newcastle. West Wallsend Colliery, Wallsend.
SOUTH AUSTRALIA. (Hon. Sec. 3 North Terrace, Adelaide).	The F.S. Medical Assoc. Incorp., Adelaide.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to the "Medical Journal of Australia" alone, unless the contrary be stated.

All communications should be addressed to "The Editor," "Medical Journal of Australia," B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.

The following periodicals are required by the Librarian of the New South Wales Branch of the British Medical Association to complete the series for binding. Members who have borrowed these journals are requested to return them as soon as possible.

Lancet, November 7, 1914.
Lancet, November 14, 1914.